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IN THIS ISSUE: **TOP BANANA LINE** A Photo Story b William Carrol

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RAILROAD

MAGAZINE

Originally Railroad Man's Magazine, founded 1906

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By *Herb Mott*

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a matter of PRESTIGE

FRANK W. MURPHY

WE OF THE Saginaw Division had reason to be proud in the spring of 1950. We practically had a new railroad. During the war things had been pretty well patched up, but shortly after VJ Day the board of directors, well-heeled with war profits, began spending money like modern Diamond Jim Bradys. By the fall of '46, orders had been placed for everything from cotter pins to locomotives. By early '49 we had a modernized block signal system, new and rebuilt rolling stock, 131-pound mail line replacing 110, which in turn was used to replace the old 90-pound yard steel in the terminals. Our motive power was completely overhauled, except for three old engines sold to a Cuban railway. To compensate for this loss we had two new *Hudsons* with roller bearings and boosters.

Unless I was odd man on the board, most of my firing was done for the same two engineers. Tom Stevens was a soft spoken man of 66, very neat in his appearance on the job, and deeply religious. No one ever heard him swear or even use slang. The other was big Gus Johansen, known as the big Swede, although he was of Norwegian descent. The Swede was a good man and had a reputation for being able to get more out of an engine than any other man on the division. He was also known for his great strength, uncontrollable temper and his ability to turn the air blue with profanity when he lost that temper. Standing six feet five and weighing 280 pounds, he looked big even in an engine cab. Everyone remembered the morning he came in from a run of nothing but delays, wet and sniffling with a cold. After changing clothes he headed across the street to where his 1947 sedan was parked. It was raining hard so he wasted no time getting in the car. Thrusting his key into the switch he twisted the key off in the lock. With his patience already at the breaking point, he sent his fist crashing into the instrument panel. As he sat there calling the car obscene names, he discovered it wasn't his car. That one cost him a week's wages.

Through the spring months, traffic was sometimes delayed because of right-of-way construction, but the month of June saw most of this completed and we began to enjoy the smoothest conditions ever. Arriving at the yard one morning, I saw a group of men clustered around one end of what looked like a gaudily painted section of a circus train. On closer inspection it proved to be a brand new Diesel-electric freight engine. Absolutely the latest thing in motive power, with a cab at each end, she was capable of operating equally well in either direction. We had heard talk of more new engines, but had not expected anything like this. On inquiry, I learned that this was one of two such engines, the second of which would arrive later. Up in the cab was Bill Wiggins, the superintendent, talking to other officials. Anyone could see he was happy as a kid with a new fire engine.

The next evening Swede and I were chalked up for a merchandise run with Engine 3408, departure 7:10 p.m. As we moved past the station, a glare of floodlights greeted us on the south platform. Several hundred people were grouped around the new Diesel. Crossing the cab I stood in the gangway to watch, and saw that two single-file lines of visitors were passing through from end to end, while a public address system blared something I couldn't understand because of our engine's exhaust. Later I learned that all

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this was sponsored by the local businessmen's league, taking advantage of the opportunity to advertise their wares, but not forgetting to occasionally mention some feature of the new locomotive. Pointing to the new engine, I said it was a fine piece of machinery. The Swede grunted and said something about overgrown trolley cars.

After adjusting the injector I settled down to the prospect of an easy run. We had first-class rights with no scheduled setouts or pickups. No. 3408 was an oil burner and a good steamer. As the lights of the city's suburbs moved by I began wondering about the Swede. I figured that maybe he was just a little afraid of these new Diesels. Although we knew little about them, there had been much talk of their ability to produce maximum horsepower at low speed, high tractive force rating, etc. If all this was true it might be possible for some other man less accomplished in the art of handling a steam throttle to smash the Swede's tonnage records with a Diesel under him. At any rate he wouldn't talk about them, although next to the Korean War they were the main topic of discussion.

A FEW DAYS later as my wife and Mrs. Johansen were doing some back fence gossiping over the telephone, the Swede's wife happened to mention that her husband was so busy these days studying up on the new Diesels that he hardly spoke to her. I was glad to hear of this for it began to prove my theory. He was trying to figure just what chance a Diesel would stand against one of our big 2-8-8-4, 5000-series steam engines, with which he had made his finest records. Meanwhile, the company had set up special classes of instruction on the new power, requesting all enginemen to attend. At first Swede refused to have even this much to do with the Diesels, but finally to avoid official disfavor gave in and started going.

The Saginaw Division, extending between the terminals of White Lake to the north and Silver Springs in the south—124 miles in all—was a good piece of railroad. The southbound run, however, was much tougher than the northbound, because of an 18-mile grade with a 2000-yard curve right smack in the middle. The line was level for twenty miles south of White Lake, then began to drop into the valley toward Kelsey Junction, fifteen miles farther south in the basin. There it leveled off, then hit the upgrade necessary to lift you out of the forked valley around the eastern face of the big plateau and to the summit, higher than White Lake itself. This grade with its curve around the plateau was known as Bull Whip Hill. Topping the summit you were at Hunter's Point, with a water tower and a long siding for doubling the hill. From the Point into Silver Springs, slightly lower than the Point, it was a drift. The Bull Whip was the Heartbreak Hill of the division.

By mid-November, in addition to the mobilization speedup, we felt the Christmas rush and found ourselves pushing the Hog Law. The morning of December 5th gave promise of a dreary day with low gray clouds and cold rain. A long freight moved slowly out of the yard. The big Diesel at the head end roared mightily in an effort to pick up speed, for these days they were hanging everything but the yard office itself on you. Pete Laskey was at the throttle and he, like super Wiggins, was a great admirer of the Diesels. On more than one occasion Pete had told the Swede they would both see the day when steam engines would go. At this Swede would fume and offer to bet any one a hundred dollar bill that a 5000-series engine could pull more tonnage up Bull Whip Hill without doubling than either one of the new Diesels, providing, of course, he was at the *Malley's* throttle. So far as Pete knew, this was the heaviest train either of the growlers had ever tried to pull over the division. Soon after passing through Kelsey Junction he began to have his doubts when she started losing speed and dropped into the red. From then on for more than an hour it was anybody's guess what would happen. The Diesel was giving a magnificent performance of lugging ability, but Pete was con-

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vinced that a few more tons would have been too much as she finally poked her nose over the summit all in one piece.

TWO DAYS later, on learning how close Pete came to doubling, the Swede was jubilant. He insisted that a few months ago he had pulled five more loaded cars in a train of no empties over the hill that Pete's train had consisted of, and immediately boosted his offer from one to two hundred dollars. Pete checked the back records and found that Swede was right, but pointed out the fact that the run had been made in mid-summer with high temperatures and insisted he couldn't do it this time of year. Swede said he would show him if he ever got enough tonnage.

Meanwhile, talk of the dispute had spread over the whole division, not only among trainmen but yard crews, shopmen, operators and even office forces until finally Bill Wiggins, the superintendent, heard about it. With shipments on the increase, Mr. Wiggins was naturally interested in any plan for moving them faster. It wasn't long until the Swede was called to the superintendent's office where he was asked rather indignantly why he believed that a fifteen-year-old steam engine, in spite of its four cylinders and sixteen drivers, could out perform a new multi-unit Diesel engine with more overall weight and many more driving axles.

Swede was in a corner, but stuck by his guns. He had a good argument. His first point was that although the Diesel had more overall traction, he would have more concentrated traction because of more weight per driving axles; also, that on the hill's curve the Diesel would create more flange drag because of its greater length and 64 wheels, compared to the *Malley's* 38 wheels for engine and tender distributed over a shorter distance. Mr. Wiggins pondered this for a few minutes without a word, then said he would make arrangements in a few days to increase the Swede's tonnage for a test run. But he added he would not expect any gambling to be done in regard to the outcome.

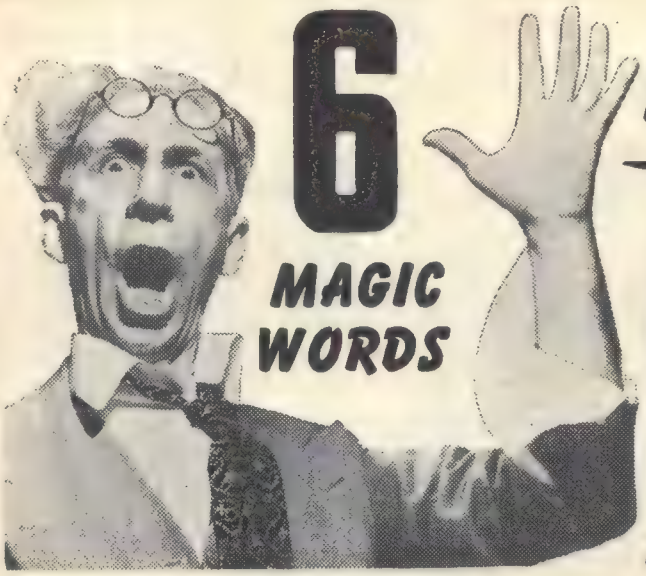
The great day arrived about two weeks later. Our train had been made up during the night and I saw in the roster that our hope would be on Engine 5010. According to the book we had exactly the same tonnage Pete Laskey had barely made the hill with. As the hostler backed 5010 slowly down to the train, Swede came out of the cab and stood watching, listening as the driving gear passed, then hurried to the other side for another check.

We didn't slip a driver getting that tonnage in motion, and by the time our caboose cleared the yard Swede had her hooked up a little. The run to Kelsey Junction was made in fine form with 5010 sounding like a jet bomber. Of course, it wasn't long until the grade began to take effect, but Swede was on the job. With a wide throttle he started notching her down. Of course the big test lay ahead.

WE HIT the curve at fairly good speed, but the engine was already working very hard; now she would have to do better at every turn of the wheels. As more of the train came into the curve we began to loose speed gradually. The Swede's face looked as if he were walking on eggs, perched on the edge of his seat box, cracking the sanders, listening intently. At any moment I expected the marked exhaust to burst into a roar that would mean spinning drivers, lost traction. As the minutes passed we continued to blast our way up the hill until finally, although our speed was down to a fast walk, she started holding her own.

We took water and had coffee at Hunter's Point, then highballed for Silver Springs. With the exception of the water stop, we had equalled the Diesel's time. After that on the Saginaw Division, 5000-series engines were rated equals of the Diesels, where tonnage was concerned.

Lately part of our runs have been made with a new Diesel and each time we get to like them a little better. They have swell cab seats, give a better view of the road and are cleaner and smoother. Still, it's like the Swede says, "There's just something about a steam locomotive that's hard to beat. Ask any kid!"



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Amazing, but true! The most sensational offer ever made! Can you imagine how much money you could make writing orders for wonderful nylons that actually cost nothing unless satisfactory? Is there any woman who would hesitate to wear beautiful nylons at OUR risk? Nothing like this has ever been heard of in the hosiery industry. Never before was it possible for any man or woman, young or old, to earn a steady income so easily!

The leading Kendex full fashioned, sheer de luxe first quality nylons have just been reduced to only $.98 a pair INCLUDING your commission, bonus and even postage. This stocking is so finely made—gives so much wear, that KENDEX will refund the full $.98 purchase price if the hose do not give satisfactory wear within a period of ONE AND A HALF MONTHS! If the hose runs, snags or shows undue wear, the hose will cost the customer nothing!

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There is nothing for you to buy or deliver. You don't risk a dime. Pay nothing now or later. Just mail the coupon, that's all. We'll send you FREE SAMPLE STOCKING and complete money-making outfit postage prepaid. You write orders. We deliver and collect. Advance cash plus huge cash bonus that increases your earnings by 40%. No obligation. If you don't make more money than you thought possible, throw the outfit away! Need we say more?

KENDEX
CORPORATION
BABYLON 89, N. Y.

FREE SAMPLE STOCKING

Date.....

Kendex Corporation
Babylon 89, N. Y.

Send me, absolutely free and postage prepaid, your complete money-making outfit including free sample stocking. It is understood I am under no obligation and if I am not satisfied with the money I make, I will throw away the whole outfit.

Name .....

Address .....

City ..... Zone.... State.....

.....

LETTER *for the* OLD CHIEF

Willie couldn't understand why Mrs. Bailiff givum heap letter to everybody, but Willie no gettum

By HAROLD L. JOHNSTON

MRS. BAILIFF was telegrapher and postmistress at Cabazon, California in 1906 when I went to work for the Southern Pacific as an extra telegraph operator. Indians were plentiful around Cabazon, since Banning Reservation was not far off. One old Indian had a habit of sunning himself on the station platform, and as the postoffice was next to the platform, this fellow, whose name

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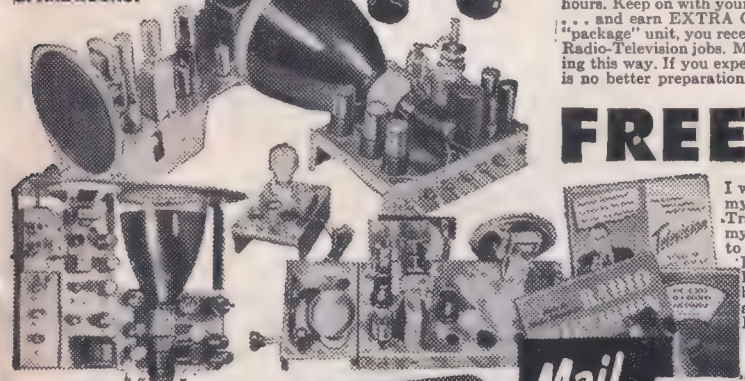

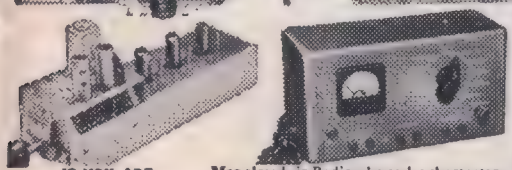

IF YOU ARE EXPERIENCED IN RADIO

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Now . . . be ready for Radio-Television's big pay opportunities in a few short MONTHS! Frank L. Sprayberry's completely new "Package" training unit plan prepares you in just 10 MONTHS . . . or even less! There is NO monthly payment contract to sign . . . thus NO RISK to you! This is America's finest, most complete, practical training—gets you ready to handle any practical job in the booming Radio-Television industry. In just 10 months you may start your own profitable Radio-Television shop . . . or accept a good paying job. Mr. Sprayberry has trained hundreds of successful Radio-Television technicians—and stands ready to train you in less than one year, even if you have no previous experience!

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The new Sprayberry "package" plan includes many big kits of genuine, professional Radio-Television equipment. While training, you perform over 300 demonstrations, experiments and construction projects. In addition, you build a powerful 6-tube standard and short wave radio set, a multi-range test meter, a signal generator, signal tracer, many other projects. All equipment is *yours to keep* . . . you have practically everything you need to set up your own service shop. The Sprayberry book-bound lessons and other training materials . . . all are yours to keep.

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All your 10 months of training is AT YOUR HOME in spare hours. Keep on with your present job and income while learning . . . and earn EXTRA CASH in addition. With each training "package" unit, you receive extra plans and ideas for spare time Radio-Television jobs. Many students pay for their entire training this way. If you expect to be in the armed forces later, there is no better preparation than good Radio-Television training.

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I want you to have ALL the facts about my new 10-MONTH Radio-Television Training—without cost! Rush coupon for my three big Radio-Television books: "How to Make Money in Radio-Television," PLUS my new illustrated Television Bulletin PLUS an actual sample Sprayberry Lesson—all FREE. No obligation and no salesman will call. Mail coupon NOW! I will rush all three books at once!

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111 North Canal St., Chicago 6, Ill.

Please rush to me all information on your 10-MONTH Radio-Television Training Plan. I understand this does not obligate me and that no salesman will call upon me.

Name.....Age.....

Address.....

City.....Zone . . . State.....

Please Check Below About Your Experience

☐ Are You Experienced? ☐ No Experience

was Willie, would watch the line form daily at the stamp window as Mrs. Bailiff handed out the mail. After the last letter had been delivered, Willie would shuffle to the window and ask:

"You catchum letter for Willie?"

Day after day this happened. As Willie could neither read nor write, there did not seem any chance he ever would get his wish.

One day Willie turned away from the stamp window as usual, but this time one of the young bucks let out a whoop and said:

"Who would write to you? You got squaw some place?" When the young man saw anger contort the old man's face, the buck realized he had made a mistake.

Old Willie had an impressive record in the past. A goodly number of paleface scalps had graced the old boy's tepee before peace had been made. The young buck beat a hasty retreat.

Old Willie, his face still seething with anger, shuffled back to the stamp window, stuck out a dirty hand and demanded of the postmistress:

"You givum Willie letter."

Mrs. Bailiff smiled and said:

"But Willie, I just told you there is no letter."

"Ugh" grunted the old man, "You givum heap letter to rest of people. Willie no gettum. Why no gettum?" he demanded, belligerently.

The subdued but still wild glare in the Indian's eyes suddenly wiped the smile from Mrs. Bailiff's face. Nervously she tried to explain that if no letter came for Willie, then it would be impossible to give him one.

"If one came for you Willie, I would be glad to give it to you. Don't you believe me?"

"No," shouted Willie, "You give to all but Willie. I am comin' in and gettum letter. Open door!" He began rattling the doorknob furiously.

Mrs. Bailiff had to do some fast thinking. Already the old man was trying to force the door. While he kicked and hammered, he kept up his demand for 'um letter.

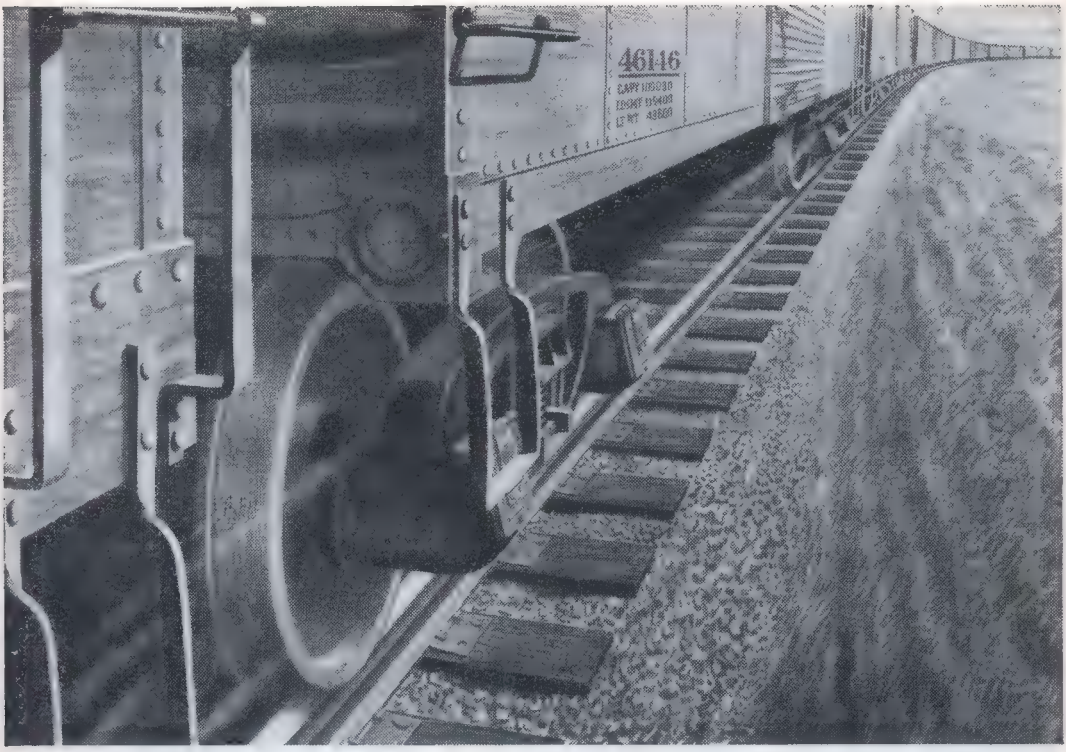
Mrs. Bailiff looked at a shotgun leaning in a corner. No, that wasn't the answer. She couldn't bring herself to use the weapon.

Then her eyes fell on the well-stuffed wastebasket. On top was a large envelope filled with advertising circulars. She grabbed it, ran toward the stamp window and yelled to the angry redman:

"Willie—Chief—I just found your letter. Here it is."

A smile spread over Willie's weatherbeaten face as he took his letter and walked away, holding the big envelope where all the other Indians could see and admire. From that time on the old man always had a letter waiting for him and Mrs. Bailiff was "Heap fine squaw."

"We're getting the overflow from the railroad yards!"



The most important wheels in America!

You're looking at the wheels of a railroad freight train – the wheels on which American production and distribution depend – the wheels that make possible all kinds of modern transportation. On these wheels roll most of the things you eat, wear and use in your daily life –for they haul *more* tons of freight, *more* miles than all other forms of transportation put together.

Our stepped-up national economy and the needs of national defense call for a constantly expanding and improving railroad plant.

And that takes money—not only for fuel and wages and supplies but also money for new and better equipment of all kinds. To keep rail service growing with growing needs, railroads must be allowed to earn adequate income, based on today's higher costs of operation. Since 1939, the prices of most of the things you buy have gone up an average of about 125%, and railroad wages, taxes and prices of materials are up *even more*. But the average railroad revenue for hauling a ton of freight one mile is only about 45% above 1939 levels.

Because railroad service is such a vital part of the life and progress of the whole nation, the railroads must earn enough, not just to keep *going*—but to keep *going ahead!*

Association of American Railroads

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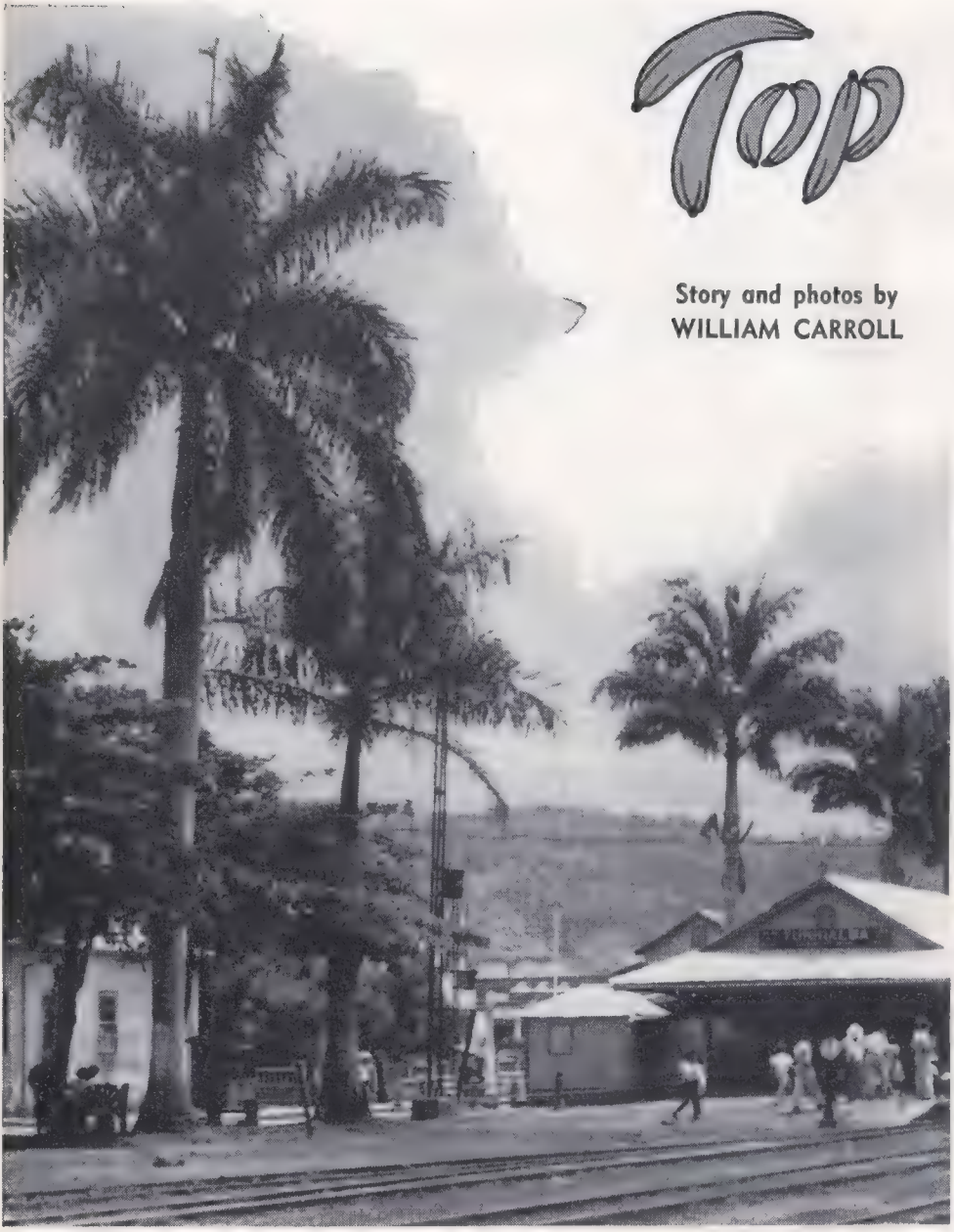
Top

Story and photos by
WILLIAM CARROLL



THE NORTHERN Railway Company of Costa Rica is no plantation line, but an important asset to the basic economy of our Central American neighbor. The Northern provides the only ground transportation from San Jose, the capital city, to the major seaport of Costa Rica, Limon. And it is through Limon that most of the imports from Europe and the eastern sector of the United States must pass.

Daily passenger service is offered over 179 miles of trackage with a collection of British, American, and German equip-

Banana Line

Not a Slip in a Carload, But Landslides Are Unique Hazards On the Northern of Costa Rica

ment dating back to 1896. The problems consist of a right-of-way subject to frequent landslides from a geologically young terrain, an average rainfall of 11.97 inches per month, and a main line so crooked that in one 40-mile stretch it makes 56 complete circles.

Historically, the road's early problems resembled those which confronted the builders of the Panama Canal. The Northern was completed in 1890, after 19 years of the hardest work. Over 4000 laborers (mostly Italian) died from disease just in getting the first 25 miles of rail through

lowland jungles. After completion of the line, builder Minor C. Keith realized the need for a local industry to support his newly completed railroad. From plantations in Colombia he bought banana plants, found they grew well in Costa Rica, and began the dynasty which expanded into the world's largest grower of tropical fruits—the United Fruit Company.

From a traveler's viewpoint, the scenery from Limon to San Jose can be considered comparable to any in the whole world. The right-of-way follows the coast for a few miles under overhanging coconut palms beside tropical beaches of exquisite beauty. Then it turns inland through banana and cocoa plantations, thick jungles alive with gaily colored birds, and past clusters of small homes for the plantation workers. Thirty-seven miles from Limon, a short stop is made at Siguirres for a meal in the station restaurant. Leaving Siguirres, the train passes over several large rivers before starting up the Rio Reventazon Canyon. In the canyon, between high mountains and magnificent scenery, a narrow terrace has been cut to permit clearance for the rail line, and it is here that most of the road's troubles arise, from washouts and landslides. Further in the mountains, coffee plantations are passed, and finally the tropical lowlands are left behind as the train enters Turrialba. The rails have taken some 60 miles to climb 2000 feet, but in the next 30 miles they rise 3000 feet more, to cross the Continental Divide at an altitude of 5137 feet. From the divide, at El Alto, it is an easy 1100-foot drop and a ten-mile run into San Jose, the heartland of Costa Rica.

IN ADDITION to the 103-mile main line from Limon to San Jose, there are innumerable trunk lines serving small towns and large plantations. Standards of maintenance are extremely high—bridges, signs and stations are in excellent condition, right-of-way is well cared for, rolling stock gives little trouble. The gage is 42 inches, with 50-pound rail used on branches, spurs and yards. The main lines are laid with 60- and 70-pound stock. The road is all single track, there is no block system, and all switches are thrown by hand. Every train (motor cars, too) travels on right-of-way tickets, and must sign in and out of the three divisions.

There are two passenger runs daily both ways, between Limon and San Jose, with Penshurst, Alajuela and Guapiles getting service once daily. All freights are run as extras, taking care of the considerable business available, on an *as required* basis. The Northern also operates wharves at Limon capable of handling five ocean-going steamers simultaneously; maintains the wire communications between Limon and San Jose, and supplies all the water for Limon—and a large portion of the town's prosperity.

On the payroll are nearly 2000 persons, including 43 engineers, 56 firemen, and 66 brakemen. The main shops are in Limon, with minor repair facilities being maintained at San Jose. An extensive lineup of rolling stock includes 34 locomotives (13 with superheaters), 42 passenger cars, 17 cabooses, 345 box cars, 236 flat cars, plus a goodly assortment of rolling stock to handle any cargo, including money, in a burglar-proof payroll car. There are 3 motor rail buses for branch line service, and the maintenance division can list 31 units in operation.

Passenger fares are low—a first class ticket for 103 miles of dramatic scenery costs only $1.35, which is a terrific bargain in any man's language. Freight rates are reasonable, and the line would prosper, if nature would just leave it alone. Unfortunately for the Northern, its right-of-way was laid out over an infant terrain subject to many landslides and slippages. The flow of mud into hill cuts must be continually cleared to mountain traffic. At times a single rainfall has caused as many as 200 landslides.

GENERALLY, slides are of a minor nature, but in November 1944 a 500-foot drop occurred containing rocks which measured 40 feet across their face. Rather than try to clear away this bulk, workers

Built in 1908, the Northern's San Jose station hasn't changed much since. *Crowd* shown occurs only at train time—six passenger runs leave San Jose daily—and for the rest of the day the station is just about deserted

made a hillside cut into the slide, and the track was relaid with a 30 degree curve. This repair lasted only 40 hours before an even bigger slide washed the whole effort away again. Instead of continuing to move the dirt or cut into the slide, a 760-foot trestle was constructed around the mass for a permanent roadway. Because another area was also causing trouble, a temporary trestle was built in the Reventazon River, to handle traffic, while a tunnel shed was constructed of concrete over the regular right-of-way. Today, seven years later, the shed is a complete tunnel, covered over with debris which has slid from the mountain side.

In July 1945, at Mile 46.1, a local passenger train was passing just as a rock fall began. A boulder of about two cubic yards rolled down the mountain side, entered the open baggage car door, and tore a hole in the opposite wall as it left. No one was injured, although the big rock could just as easily have entered a coach full of passengers.

Owned by a British holding company, the line is operated by two Americans, General Manager C. W. Averre and Chief Engineer C. O. Riggs. All other employees are Costa Rican nationals.

Because the Northern is 50 percent of the only trans-Isthmian railroad line in Central America between Guatemala and Panama (the other 50 per cent is the Costa Rica Government's electric railway) its importance to the country's economy is plain. And for those fortunate enough to ride through the Reventazon River canyon, the dramatic scenery is a memory to be treasured.

On this curve in December 1949 the rampaging Rio Reventazon washed out 400 yards of main line, but the Northern has had no trouble since constructing a concrete retaining wall and back-filling it

Riders, past and present. Costa Rica's president rides in a palatial chair car, ***right***, during his infrequent trips. In wet weather, most roads are impassable, so even funerals, ***below***, go by train. The Costa Rican ruler's car, built in Lancaster, England, has hand-carved native mahogany, kerosene lamps, wicker furniture, two bedrooms, a wide rear platform, a galley with a large icebox, and cast-iron grills carrying the Seal of Costa Rica. For funerals, the railroad provides a special car for the casket, mutes the engine bells, silences the whistles, carries the mourners 1.3 miles out of Limon to Cementerio siding and waits until the burial is completed

The Northern's enemy—landslides. Temporary track, *below*, covered more than two miles of main line, and the slide stretched nearly a mile to the right of the river. As soon as trackage was constructed over the area, an emergency dispatcher office was opened in a small shed, *left*, but because of the danger from more slides, no night traffic was permitted, even though the need for freight was pressing. Track crews had little trouble keeping ties from sinking, but couldn't stop the whole area from settling under load weight, causing rolling stock to toss from side to side

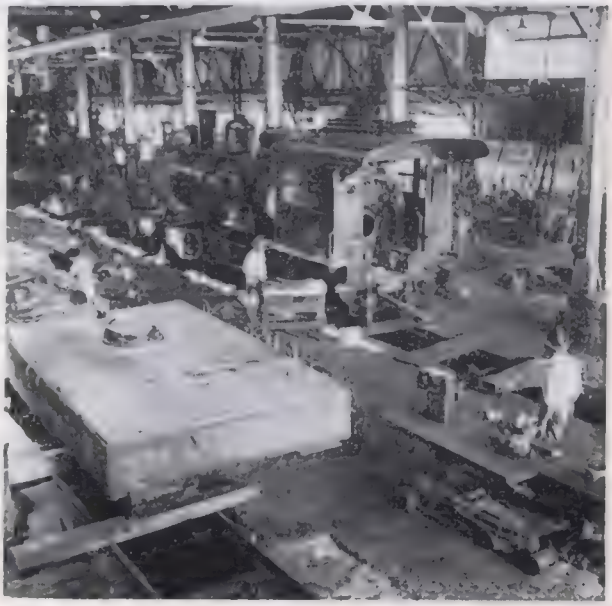
Only last March two miles of main line from San Jose to Limon were buried under a mountain slide, ***right***, causing Western Division right-of-way Supervisor G. Castillo and General Manager C. W. Averre no end of trouble. Most of the 160 men making a rock fill secured stones from the slide itself and hand-carried them, ***above***. You may not believe it, but this section of twisted track actually is over one mile from its original location. Among the gandy dancers, eating utensils are at a premium, so the laborers carry oatmeal cans at their waists and use them for lunch

Ties and rail, salvaged from an unused spur, went into the building of the temporary main line, passing over the largest landslide ever to stop a railway in the Western Hemisphere. To clear the right-of-way for passage of rolling stock, hydraulic teams were used

Passenger traffic was maintained by a combination of Yankee and Latin ingenuity—trains ran on each side of the landslide, permitting riders to walk over and complete their journey on another train. Note the dirt level at the tunnel mouth. Two large bulldozers were lost, but one was salvaged several weeks later

Mainline traffic was disrupted by the huge landslide; no freight was hauled, and as the customs warehouse was full, boxcars were used to store merchandise

All traffic from Limon west to Siguirres (Mile 37.1) and south to Penhurst (Mile 28) is handled by the Limon dispatcher, who switches, with foot bar, from *talk* to *listen*. The Northern operates and maintains the only wire communications between the Atlantic Coast and Costa Rica's capital city, San Jose. Over the railway lines go telephone, telegraph, government and cable company messages. No. 43, an 0-6-4T built by Baldwin 56 years ago, is a good example of the Northern's most useful motive power—six tank locomotives. The six-coupled, 48-ton tanker has double air pumps, a continental style head, 38-inch drivers and, what you can't see, a tractive force of 18,270 pounds



At the Limon shops workmen turn out a complete overhaul in four to five months, including the casting of new major components such as steam chests and pistons. Tank in the foreground, ***right***, is from Engine 24, built in 1887 by Beyer Peacock & Company in England. After rolling stock has been serviced in the shops, it is pushed through a dip tank of Diesel oil, ***above***, and set out on the far end to drain. High humidity of the tropics, plus frequent rains, makes rust prevention necessary, and the dip tank has proven to be the most practical of all methods

From Limon to San Jose the first 12 miles of main line runs through tropical jungles, where many laborers live next to the right-of-way. A local train with a pay car stops every two weeks, and vendors do a rushing business selling government lottery tickets

Only a short distance west of Santiago (Mile 79.1) is a waterfall which sprays passing trains during the yearly rainy season. Many Costa Rican farmers express amazement because the fire doesn't go out as the engine passes under the falls

Photo by C. B. Chaney

ACME of the Atlantics

FREDERICK WESTING

Pound-for-Pound Pennsy's Big-Boilered E6s Proved to Be the Greatest Locomotive Going

RAILROAD-wise, the summer of 1914 was remarkable for the plentiful appearance on the Pennsylvania Railroad of their super-*Atlantic* type locomotives, Class E6s. To admirers of fine locomotives and progressive railroading, this development almost overshadowed dispatches from Europe, for the activities of those engines were followed with an interest that allowed little competition from the highly-colored war news! In size alone they were impressive, and as they swept by when coming into North Philadelphia station, where the newly raised island platforms put one close to the massive boiler, they loomed enormously. Nothing like them had ever been seen before in the *Atlantic* type.

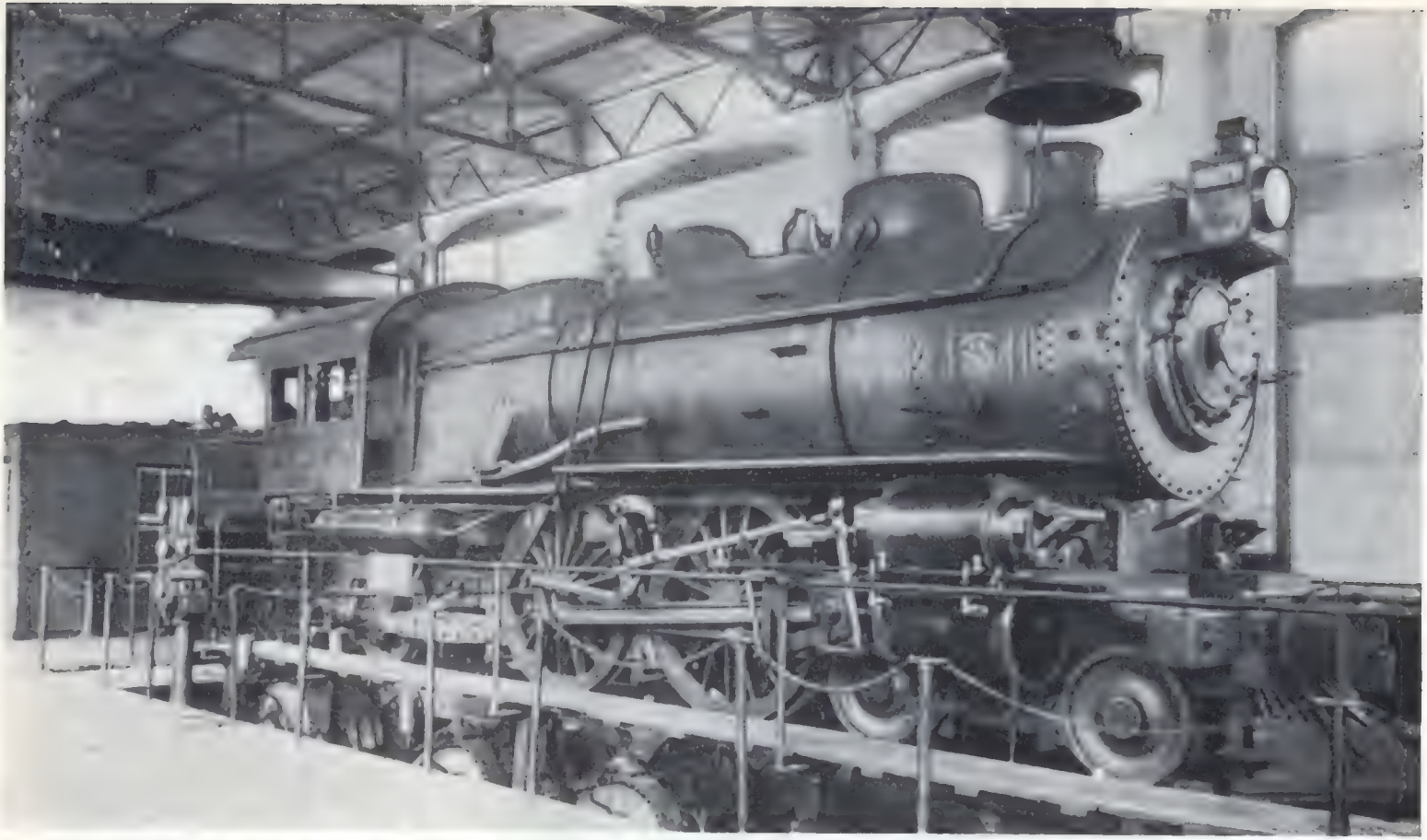
But it was their startling performances that made seasoned railroaders sit up and take notice. Passenger trains of 12 and 14 cars, with 80-ton Pullmans and dining-cars in the consist, were hauled on speedy schedules that had formerly required heavy *Pacifics*. Here was a locomotive developing 2500 horsepower on two driving axles, something that many *Pacifics* couldn't match, even with their greater weight spread over three driving axles, and doing it with high efficiency day after day on a railroad where heavy tasks were routine. If ever a locomotive proved the value of the Pennsylvania's Altoona Locomotive Test Plant, it was the Class E6s. For it was there, practically under a microscope, that the original cub E6 engines went through their paces, and where light was flashed on points that called for correction and adjustment. Let us back-

track and see what led up to the mass appearance in 1914 of these exceptional locomotives.

In 1906, increased passenger train weight and the Pennsylvania's decision that new passenger cars—both coach and Pullman—would be of all-steel construction, sparked the development of Class E6s. Up to that time comparatively small-boilered *Atlantics* worked the passenger trains, but double-heading was becoming a routine procedure and this the brass hats did not like. Clearly, a locomotive with increased tractive force at starting and at speed was needed. In view of the limited axle loads then existing, the three-drivered *Pacific* was the logical choice and in 1906 the Pennsy purchased one for experimental purposes. It was put into service on the line between Pittsburgh and Chicago where the need for it was most pressing, and soon showed the advantages of a large locomotive in heavy passenger service.

This prompted the Pennsylvania to adopt the *Pacific* as a standard engine for heavy, high-speed work, and from 1910 to 1913 many were put in service on the road east and west of Pittsburgh.

Nevertheless, Pennsy motive power



Bull-chested Engine 5075, famed E6 prototype, on Pennsylvania's Altoona Test Plant. Built-up KW trailing truck which simplified equalization of main- and trailing axles, later became one-piece steel casting. After tests at Altoona, 5075 actually outperformed heavier *Pacifics*, hauled 9-car train 105 miles at an average speed of 75 mph

men remained partial to the *Atlantic,* for where it could be used to do the job, it was, as compared with the *Pacific,* a less costly locomotive to build, operate, and maintain. Officially, the Pennsylvania considered the 4-4-2 very desirable, with features too valuable to be abandoned. It was more flexible, ran with less machine friction than the *Pacific,* and could haul trains which were heavier in proportion to its own weight than was possible with other types. Also, in 1907, the Pennsy had brought out a new *Consolidation,* Class H8, which quite noticeably featured a much enlarged boiler when viewed with its immediate predecessor of the same type. On the Altoona Test Plant, and on the road, the superiority of the large-boilered *Consolidation* over the small-boilered 2-8-0 was so plain, and the part played by the big boiler so clear, that its significance was not lost on the Pennsy. Why not a big-boilered *Atlantic?*

IMPROVED roadbed and heavier rails had brought things to a point where greater axle loads were permissable. It was now practical on the Pennsylvania to put an adhesive weight on two pairs of passenger locomotive driving wheels that formerly had had to be spread over three pairs of drivers. While this provided enough adhesion to develop a tractive force that matched their own *Pacifics,* it was decided to retain the basic proportions of the more powerful of the small *Atlantics* in the E3 Class. This meant no increase in *starting* tractive force, but it was expected that the larger boiler with its greater steam generating capacity would increase the new locomotive's sustained hauling ability at high speeds.

Soon blueprints from the mechanical engineer's office at Altoona were being transformed into parts to go into the making of an iron horse, and in December 1910, the Juniata Shops of the Pennsylvania Railroad turned out the first big-boilered *Atlantic.* This engine used saturated steam and was known as Class E6. The boiler, in common with Pennsy practice, had a Belpaire firebox and contained a short combustion chamber and brick arch. Although not interchangeable, the boilers of the big *Consolidation* and *Atlantic* bore a striking similarity, as did their "skyline"; that is, stack, sandbox, steam dome, safety "pop" and whistle.

The road number of the big *Atlantic* was 5075, which at that time meant assignment to the Maryland Division. The valve gear was Walschaerts, and closely resembled that of the Class E3d *Atlantic* in being notable for its light weight compared to the size of the locomotive. Another unusual detail was the trailing truck which had first been applied on some small Class E5 4-4-2s a short time before. This was always one of the difficult features of both *Atlantic* and *Pacific* types. Equalizing the trailing truck's outside journal box with the driver's inside axle box usually made an awkward arrangement. In the new design, later known as the KW truck, the frame and equalizer were combined and the main frames were supported upon it through sliding bearings. It carried its own brake cylinder and brake rigging.

Engine No. 5075 ran for some time on the Middle and Philadelphia Divisions, where it hauled the road's top name train, the *Pennsylvania Special* (now the *Broadway Limited)* and broke records on a run between Altoona and Philadelphia, by averaging 70 miles per hour for the whole distance. Eventually, it was put through a series of tests on the Altoona Test Plant, where with laboratory precision, information was obtained from which engineering facts were sifted with certainty.

Shortly after this check-up, the locomotive was put into some keen competitive running against heavier *Pacifics* on the lines west of Pittsburgh. In September 1911, arrangements were made to test Engine 5075 on the line between Fort Wayne and Valparaiso, Indiana, a distance of 105 miles. Stacked up against the E6 were saturated-steam K2 *Pacifics,* Nos. 9996 and 9999, and a K2a *Pacific* No. 7514, which used superheated steam. This is what the E6 did: it hauled a 9-car train over the 105 miles at an average speed of 75 miles per hour. With a 13-car train on

Trial and error went into making of Pennsy slogan, "Standard Railroad of the World." On E6sa, ***above***, "a" stood for Corliss rotary valves with which this engine alone was equipped. They were later replaced by conventional piston valves. When 1092 was outshopped, KW trailing truck was still "built-up" affair

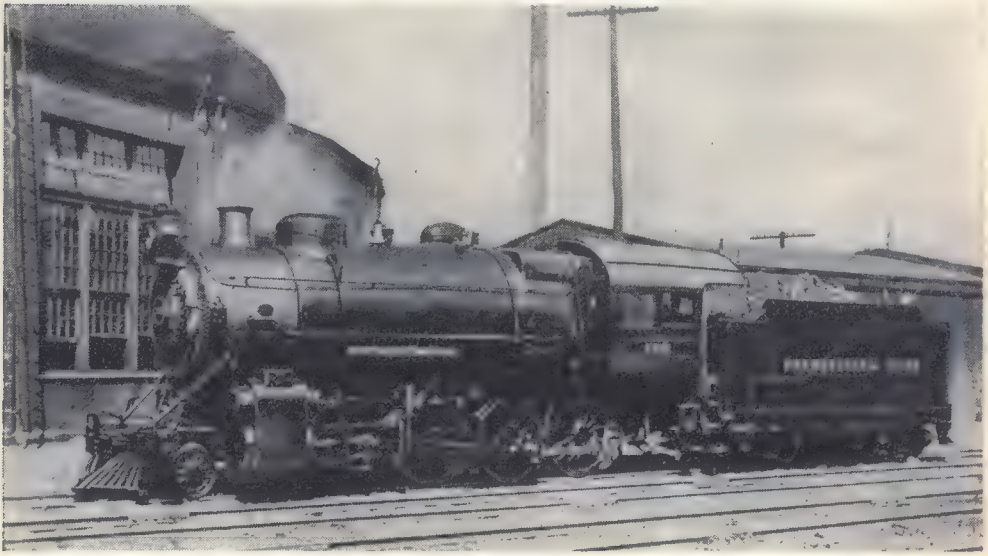


Photo above from R. C. Schmid; below from D. A. Somerville

Above: It was no coincidence that ***Consolidation*** 7501's silhouette resembled that of E6 No. 5075, for performance of big-boilered 2-8-0 gave Pennsy designers idea of creating barrel-chested ***Atlantic***. ***Below:*** Clean lines of 1914 E6s were somewhat marred in later years by addition of outside air brake piping, tender headlight, running lights on pilot beam

the same run it averaged 66.6 miles per hour, and covered the same distance with a 15-car train at 58 mph. The E6 out-performed the saturated-steam K2 *Pacifics* handily, though it was slightly surpassed by the superheated 4-6-2. It was said, however, that the fireman on those E6 test runs was on the superhuman side, and could outshovel an automatic stoker!

IN THE meantime, superheating had been adopted by the Pennsylvania Railroad, and in 1912 two big new superheated *Atlantics* were built at Altoona. These engines carried road numbers 89 and 1092. Engine 89 was given an E6s classification, the "s" referring to the application of a superheater. Engine 1092 was equipped with rotary valves, something like the old Corliss valves used years ago on stationary steam engines. It was known as a Class E6sa at the time, but the rotary valves were soon replaced by standard piston valves, and the "a" was dropped from the badge plate on the smokebox. Later that year, No. 5075 was fitted with a superheater and all three engines were then classed as E6s. Like the first E6, No. 89 soon found itself chugging away on the treadmill-like test plant, seemingly getting nowhere, but really showing such progress over the saturated-steam E6 that the value of superheating for this class was fully established. Tests proved that the big boiler with a superheater could supply larger cylinders and provide increased tractive force.

In 1913, the cylinder diameter of these three engines was enlarged 1½ inches, which upped the tractive force from 27,410 lbs., to 31,275 lbs. Meanwhile, Engine 5075, which had been found a bit heavy for the Maryland Division, pending some bridge strengthening, swapped numbers and operating locations with small-boilered *Atlantic* No. 1067, of the New York Division.

Top management was now convinced that Class E6s was fully equal to the requirements of practically all of their passenger train schedules, with the possible exception of mountain grade territory. It was plain that the Pennsy had a champion on its hands and in 1914 the go-ahead was given for the construction of 80 additional E6s locomotives to be built at the company's Juniata Shops at Altoona. Right from the erecting shop they went into mainline passenger service and speedily won the admiration of their engine crews —the men who really can judge a locomotive.

Not only did the Pennsy think highly of these 1914 *Atlantics,* but elsewhere the E6s was hailed as the most advanced locomotive design in *America.* It was the acme of the *Atlantic* type. Main reasons for this opinion were the locomotive's high

Usurper K4s, also originated in 1914, gradually took over from lighter *Atlantic* when trains grew longer and heavier. No. 1737, *below*, first *Pacific* of this class, was designed with big boiler like E6, also KW trailing truck

D. A. Somerville

drawbar pull at high speeds; its unusually heavy weight for a four-coupled engine; its novel arrangement of spring equalization and exceptional design of light-weight reciprocating parts, which greatly reduced rail hammer blow. This reduction in "rail banging" was a big factor in the feasibility of increased driving-axle loads, which permitted the use of the heavier and very powerful boiler, which in turn accounted for much of the high power of the locomotive.

The 1914 version of Class E6s featured boiler tubes that were 1 foot 3⅛ inches longer than in older 4-4-2s and had a 2-inch reduction in piston valve diameter, which pared down weight without loss in efficiency. A striking innovation was the method of spring equalization. The front truck was equalized with the front pair of drivers, and the trailing truck with the rear pair of drivers. This resulted in a stability similar to that of a two-truck vehicle like a car, and made a remarkably easy-riding machine, one exceptionally free from destructive action on the track. Heat treated steel was freely used throughout and contributed much toward reducing dead weight. The KW truck, formerly a built-up affair, was now a one-piece steel casting, very neat and compact. It reflected great credit upon the KW combination which invented it, Messrs. William F. Kiesel, Jr., and Charles T. Westlake.

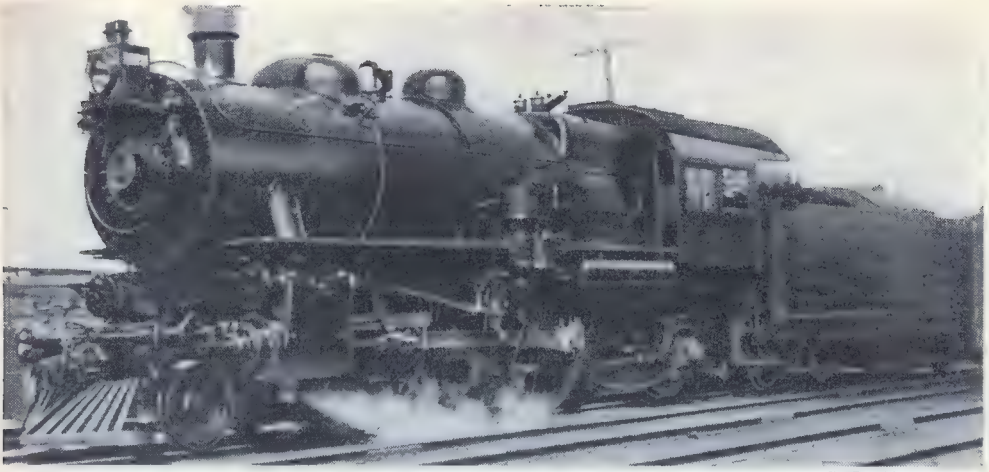
Another interesting item was the piston rod. This was of the extension type and ran in guides which projected beyond the end of the cylinders. It was made from a rough forging drilled hollow for its full length of 8½ feet. In place of the two-bar guide or alligator type crosshead previously used, a three-bar guide with crosshead to match helped to turn reciprocating motion into rotary motion for revolving the driving wheels.

ALL THE good points which the test plant and road running had brought to light were put into the 80 new engines of the E6s Class. All were fitted with a wheel-and-screw reverse gear instead of the latch-and-lever, which sometimes caused injury when necessary to notch-up on a high-powered locomotive. An extra large sandbox was first used, but later a new design of saddle-type sandbox was applied. Straight-line running-boards on both sides of the locomotive added to the clean-lined appearance. The later E6s engines with the smaller sandboxes also appeared without the small running-boards between the pilot beam and the steam chests for ready access to the running-boards alongside the boiler. They were replaced by a step on each side of the locomotive supported by a bar and fastened to the pilot beam. This soon became standard practice. Compressed air for braking was "squeezed" by a cross-compound pump in place of the single-stage "donkey" air pump. Nor was the tender left out in this far-sighted re-designing; an entirely new type of solid-frame pedestal type truck known as the "dolphin" was applied. Compressed air operated the water scoop and made things safer and easier for the fireman.

Inasmuch as the Altoona Test Plant played such a big part in producing the E6s, a brief description of its basic function may be of interest. The test plant temporarily turns the locomotive into a stationary steam engine by holding it still as it operates under full power at a speed as high as 85 miles per hour, if need be. It also provides means for measuring the locomotive's actions and power output. As the speeding driving wheels pound away upon the supporting wheels, the test plant mechanism absorbs the tremendous power developed by the hard-working locomotive. The Pennsylvania Railroad Test Plant was originally installed at the Louisiana Purchase Exposition which took place at St. Louis, in 1904. At the Exposition's conclusion the plant was removed to Altoona, where it still stands, the largest of its kind in the United States.

As usual, one of the new 1914 E6s engines was given a work-out on the Test Plant. This took place in 1914, and E6s Engine No. 51 turned in results that were

Continued on page 38

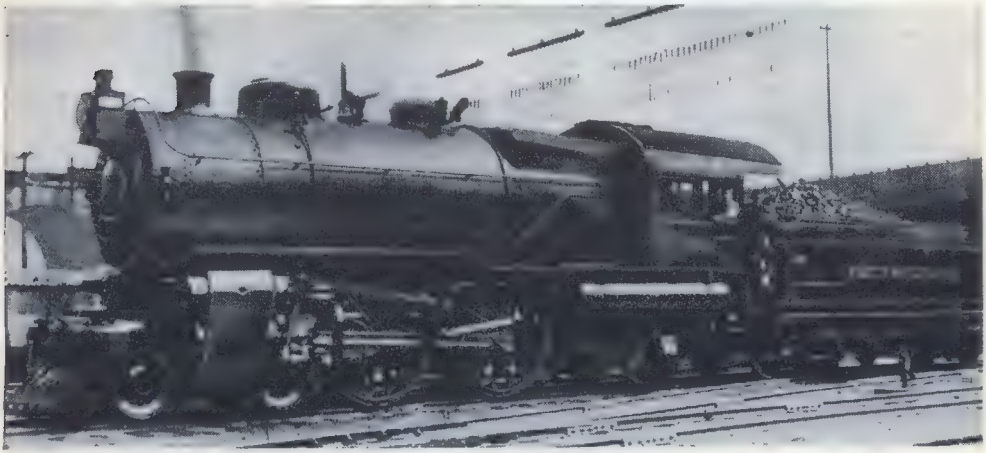


C. B. Chaney

The acme of the *Atlantics*. Engine No. 1179, built in 1914, with saddle-type sand dome, cast-steel KW trailing truck and cross-compound air pump

Photo above from W. A. Lucas; below from J. S. Powell

Above: **E6s No. 1211 with steel pilot, turbo-generator headlight replacing original oil-burning headlight, and other modern doodads. *Below:* Prototype 5075 on the road. Note single-stage air pump. After exhaustive tests with first three E6s *Atlantics*, enthusiastic Pennsy management gave go-ahead for building of 80 more at Juniata Shops**



Fred McCleod

Built to take over from K4s *Pacifics*, which in turn had displaced E6s *Atlantics* in heavy duty service, photogenic T1's futuristic exterior couldn't save it from being itself outmoded by ultra-modern Diesels. Its 4-4-4-4 wheel arrangement held individual main- and side-rod weights down to E6s proportions

really sensational. The advantages of increasing the boiler tube length, and enlarging the cylinders in combination with superheating was made evident when No. 51 developed 2500 horsepower at a speed of 56 miles per hour. This meant that one full horsepower was developed for every 96.5 pounds of locomotive weight. When it came to coal and water consumption, Engine 51 produced one horsepower-hour on 2 pounds of coal, and 17.6 pounds of steam. This high power output in proportion to low fuel and water consumption earned the Pennsy some nice pats on the back.

The new engines immediately went into service handling the hardest passenger train assignments on the New York and

C. B. Chaney

Good things come in small packages. Pound for pound, there has never been a faster, more powerful steam engine than the E6s. *Below:* No. 779 does 60 with 13 cars, Washington to New York

Charles A. Elston

Pictured on wire train in 1947, small-boilered E3 *Atlantic* was forerunner of the E6. She was built at Juniata Shops about 8 years before Pennsy went all-out for big barrels

Maryland Divisions, and also on the main line between Philadelphia and Altoona. On the seashore divisions, their speediness rapidly brought them fame. A former locomotive designer of the Reading Railway told the writer that the Reading had never feared Pennsylvania competition on the Philadelphia-Atlantic City run, but when the 1914 version of the E6s came out, he said, "Those engines had us worried." And small wonder, for there was not an *Atlantic* anywhere that could match them. Later, the Reading did come out with four big 4-4-2s somewhat similar in size to the E6s, but they were makeshifts, having been converted from a 4-4-4 type. They never matched the performance of the big Pennsy *Atlantics* in operating efficiency.

IN 1914 and 1915, E6s No. 425 regularly handled the *Manhattan Limited,* eastbound, and the *Broadway Limited,* westbound, between Manhattan Transfer and Harrisburg. Engine No. 779, another E6s, at that time regularly hauled the southbound *Congressional Limited* between Manhattan Transfer and Washington, D. C. Once, in May 1915, this same Engine 779, or "Big E"—as a Pennsy man would call it then—with a 9-car train piloted by Engineer Martin Lee, covered the 36 miles between Washington, D. C. and Loudon Park tower, in 25 minutes. This was one minute faster than the time made later by the 2-car comet-like *Lindbergh Special* for the same run. On February 16, 1915, E6s No. 261 ran from Fort Wayne, Indiana, to Manhattan Transfer, New Jersey, a distance of 752 miles, and returned the same day with the *Manhattan Limited.* It arrived at both terminals in good order, and on time.

Right from the start the E6s showed amazing capabilities, but it took the test of time to really spotlight the heights which it could reach. For example, when a special train was called to make a speedy dash over the rails, it was an E6s that used to carry the official extra markers of "two white flags by day plus two white lights by night." Such a train was the 3-car special, which in January 1925 carried Cantor Joseph Rosenblatt over the New York Division between Broad Street Station and New York City, 91.5 miles in 81 minutes, to keep a singing engagement. A stubby, thick-set E6s, No. 5222, covered the 83 miles to Manhattan Transfer in 68 minutes. There, electric power took over for the run to New York.

But the all-time high for an E6s was made on June 11, 1927, when the 2-car *Lindbergh Special* whizzed between Washington, D. C., and New York, 224.8 miles in 187 minutes, averaging a bit over 72 miles per hour. The occasion was the

C. B. Chaney

Oil-burning headlight, wooden pilot, single stage air pump—a typical E6s as 80 of them rolled out of the Juniata Shops in 1914. These sleek and powerful little engines have long been relegated to such chores as pulling wire trains in electrified territory, but for a few years they kept the Pennsy at the head of the pack in high speed passenger competition

speedy delivery of the films showing Colonel Lindbergh's return to the United States after his own epoch-making flight. By using one of the cars on this train for a darkroom in transit, it was possible to have the films ready for immediate showing on arrival at New York. In this manner, rivals using planes were beaten. The train was hauled by E6s No. 460, which had been built in September 1914, and was the last locomotive of the class ever constructed. It covered the 216 miles between Washington and Manhattan Transfer in 175 minutes at an average speed of 74.06 miles per hour. The 82 miles between West Philadelphia and Manhattan Transfer were reeled off in 64 minutes—the record for steam power on the New York Division.

Another E6s, No. 3002, had the honor of hauling the train sponsored in 1939 by the American Association of Railroads in the highspeed freight car truck tests. These took place on the Pennsylvania Railroad between Altoona and Lock Haven, Pa., in order to find out the action of certain freight-car trucks at a speed as high as 85 miles per hour. The reputation of the E6s as a speedy locomotive, and its handiness in rounding curves, decided the choice of power for this important train. On the whizzing Detroit-Chicago daily *Red Arrow* runs which called for 115 minutes of fast-flying countryside for the 141-mile run from Fort Wayne to Englewood station in Chicago, it was E6s engines which first headed the tuscan red Pennsy speedsters.

EVEN after the appearance of the mighty K4s Class *Pacifics,* the E6s engines took their turn with the same traffic, not infrequently hauling heavier trains than some of the jobs given to the K4s. It is significant that many of the basic features of the big *Pacifics* were copied directly from the E6s. In fact, the K4 has aptly been called a "lengthened-out E6s." But trains kept growing heavier and schedules tighter. Came the time when it was impractical to get the power from a four-coupled locomotive that could be obtained from a six-coupled design. Slowly but steadily, the K4 *Pacifics* took over more and more of the mainline business, until electrification and the Diesel-electric put steam into the background.

As years went by the smart 1914 appearance of the E6s was somewhat marred by certain changes; a steam turbine-electric generator behind the stack, more external air-brake piping, cinder shields on the cab roof and a steam deflector in back of the safety valves and whistle, broke up the clean lines of the early model.

A brief comeback was made by the *Atlantic* type in 1935, when an ornamental 4-4-2 went into service on the Milwaukee *Hiawatha.* That engine, though, was somewhat on the freakish side, covered as it was with a bathtub-like shroud to pep up its personality. Only three such locomotives were built and they were soon superseded without having exerted any influence on locomotive design. The E6s, on the other hand, with its glistening coat of Brunswick green, and gold leaf applied with admirable restraint, needed no "falsies" to proclaim it for what it was: an outstanding example of successful locomotive engineering.

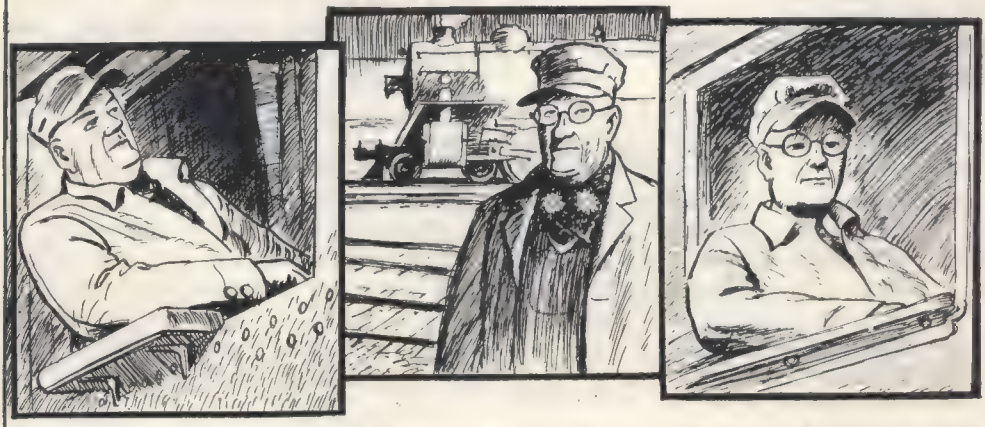
What a "super" E6 could have done, using roller bearings, light-weight nickel-steel boiler shell, feedwater-heating and automatic stoker, can only be guessed at now; but the Pennsy did consider such a step in a proposed E8 Class. This engine was to handle a train, say like the *Congressional Limited,* and do it on the schedule made by the costlier and heavier *Pacifics* at reduced operating costs. This could have been done, but large-scale electrification ended the idea. In the last stand of Pennsy steam power, the giant T1 was really a throw-back to the *Atlantic.*

Some of the E6s engines from a total of 83 have been scrapped; one, No. 13, was turned into an oil-burner, and a few are working the wire trains in electrified territory. Ultimately, all of them will disappear, but they played their part well, and did much, very much, to make the slogan "Standard Railroad of the World" more than an empty advertising plug.

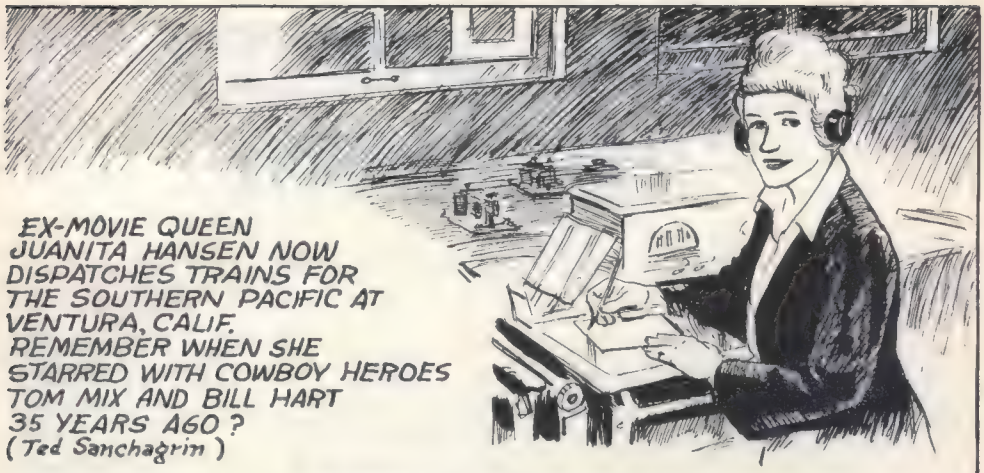
ALONG THE IRON PIKE

by JOE EASLEY

PRICES HAVE GONE DOWN! A CENTURY AGO WATER COST RAILROAD TRAVELERS A PENNY A GLASS. TRAINMAN OR NEWSBUTCHER OWNED CONCESSION, A GLASS-HOLDING COPPER KETTLE. (Baltimore & Ohio Magazine)



FRENCH PRIEST, WHILE HELPING AT ST. BENEDICT'S PARISH IN MONTEBELLO, CALIF. SUPERVISED CONSTRUCTION OF ELABORATE THREE-LEVEL MINIATURE RAILROAD. WOODEN STRUCTURE TOOK FATHER P. L. HARMEL OF PARIS, AND TEN BOYS ONLY THREE MONTHS TO BUILD (Alvin A. Fickewirth)



EX-MOVIE QUEEN JUANITA HANSEN NOW DISPATCHES TRAINS FOR THE SOUTHERN PACIFIC AT VENTURA, CALIF. REMEMBER WHEN SHE STARRED WITH COWBOY HEROES TOM MIX AND BILL HART 35 YEARS AGO ?
(Ted Sanchagrin)

THE RAILROADING SPANGLER BROTHERS---FIVE LOCOMOTIVE ENGINEERS AND A STATION AGENT---MADE SUCCESSFUL CAREERS ON THE NORFOLK & WESTERN A FAMILY TRADITION. NATIVES OF PETERSTOWN, W. VA., HOGGERS CLARENCE, IRA, FRANK, GEORGE AND HUGH (RETIRED) PLUS AGENT PORTER TOTAL OVER 270 YEARS OF SERVICE (N&W Magazine)

GEN. OMAR BRADLEY CREDITS HIS MILITARY CAREER TO A RAILROAD PASS. WITHOUT IT HE NEVER WOULD HAVE MADE TRIP TO JEFFERSON BARRACKS, ST. LOUIS TO TAKE WEST POINT EXAM WHILE HE WAS BOILERMAKER'S APPRENTICE AT MOBERLY
(Gen. Omar N. Bradley)

The GREAT ERIE WAR

LUCIUS BEEBE and CHARLES CLEGG

ASSASSINATION OF COLONEL JAMES FISK, JR., BY EDWARD S. STOKES AT THE GRAND CENTRAL HOTEL—THE SCENE OF THE TRAGEDY.

Text and Pictures of This Feature Are From HEAR THE TRAIN BLOW, Which E. P. Dutton Will Publish Next Fall

THE NINETEENTH CENTURY knew many railroad wars, inter- and intra-mural, between owners and workers, between transportation empires for rich prizes of operation or finance and between railroad barons for domination of their empires. No railroad war, however, ever achieved the disastrous and celebrated proportions of the one which was waged for the control of the Erie Railroad between Commodore Cornelius Vanderbilt on one side and Dan'l Drew, Jay Gould and Jim Fisk on the other.

In 1867, the Erie with a long trail of financial disaster already behind it, fell, one evil day, under control of a directorate which included Drew, a one-time cattle drover credited with having originated the practice of selling watered stock; Fisk, a former circus barker and pack peddler, and Gould, a shrewd and hardbitten tycoon who was eventually to take his place among the authentic architects of railroad empires. Their reign of Erie coincided precisely with the emergence as a great railway system of the New York Central and Hudson River Lines of crusty, hard-hitting old Commodore Vanderbilt. Vanderbilt saw in Erie's possible completion through to Chicago a rival for the traffic of his ambitious linking of New York with the West through the agency of the Lake Shore & Michigan Southern, and the old gentleman lost no opporunity to buy Erie stock with an eye eventually to controlling its destinies and protecting his own interests.

Appreciative of this ready market for its paper and uninhibited by any least trace of ethics, the directorate of Erie set about gratifying the Commodore's hanker for great wads of Erie stock. The fact that no new stock issue was authorized by law didn't hinder Gould from buying a rotary press and starting to print handsome Erie certificates by the mile. They were engrossed with a classic Goddess of Plenty pouring the fruits of earth from golden cornucopias, and the Commodore loved every gaudy one of them.

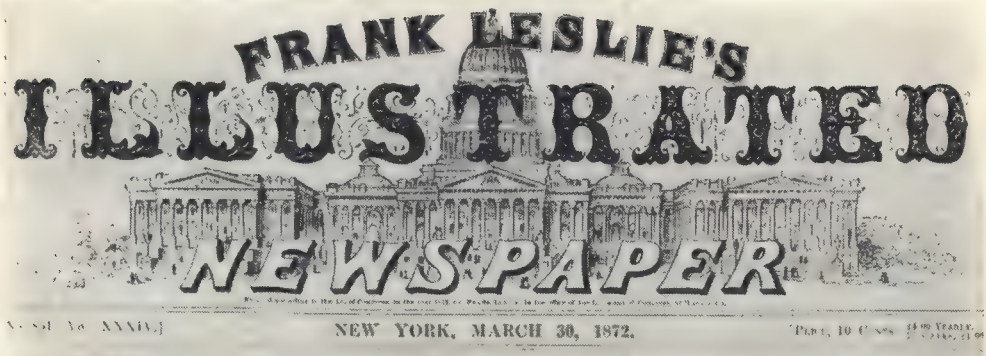
"If this damned press holds up we'll feed the old hog all he wants," remarked Fisk.

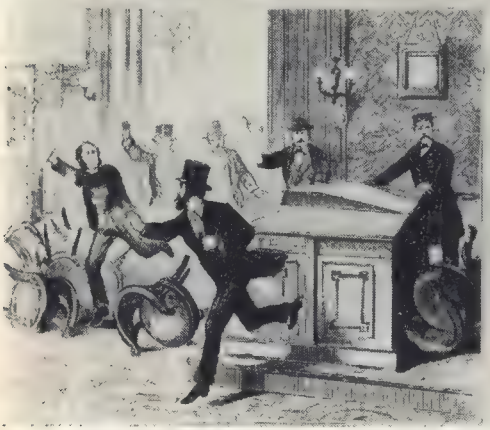
But somewhere along the line shrewd, old Commodore Vanderbilt was wised up, and warrants for the arrest of the stock jobbers were issued in no time flat. Fisk, Gould and Drew boarded a ferryboat in the dead of night and landed safely in New Jersey with $6,000,000 they had thoughtfully removed from the office safe. So began a long series of suits and countersuits, writs, attachments and complex legal devices between Vanderbilt and the Erie board, and all the time Vanderbilt continued to buy Erie as it was offered, a practice which set in motion a speculative market for the shares never before known on the New York Stock Exchange.

The New York Legislature in Albany was visited by a representative of the Drew faction with a large suitcase filled with thousand dollar bills and almost immediately thereafter the Legislature passed an *ex post facto* decree legalizing the hitherto bogus stock issue. The Commodore was left holding the bag and the merry boodlers returned to New York where they moved the Erie offices from their former modest and businesslike premises on Duane Street into the gaudy precincts of Pike's Grand Opera House.

For good measure the convivial Jim Fisk, who was by this time the "Admiral" of the Hudson River Line of steamships, Colonel of New York's 9th Regiment and on drinking terms with President Grant, bought a residence next door to Pike's and installed therein a third rate actress named Josie Mansfield who shared his merrier moods. For convenience a passage

THE NEW BOARD OF DIRECTORS OF THE ERIE RAILWAY COMPANY IN SESSION AT THE OFFICES IN THE GRAND OPERA HOUSE BUILDING.





JAY GOULD ENDEAVORING TO AVOID THE SERVICE OF LEGAL PAPERS UPON HIM.

THE GOULD PARTY RESISTING THE ATTEMPT OF THE NEW BOARD TO FORCE AN ENTRANCE.

was constructed between the buildings.

By this time Erie stock was hitting a new low and was, in fact, valueless in England where a great deal of it was held. Finally Gould was pursuaded to resign with a reported profit of $25,000,000 on the wrecking of Erie, and time caught up with "Admiral" Fisk. A rival for the favors of Josie in the person of New York socialite and millionaire Edward Stokes shot Jim on the staircase of the Broadway Central Hotel and when hotel attaches caught up with the body as it rolled down the Brussels runner it was found that a funeral, first class, was in order.

When the shouting subsided it was found that Erie was nearly ruined as an operating enterprise and was completely bankrupted in a financial way. Commodore Vanderbilt was out of pocket a substantial fortune which, happily, he could afford, and the affairs of Erie had produced a convulsion of sensationalism and maudlin sentimentality in the nation's penny press.

To this day responsible executives and friends of the Erie Railroad, still celebrating its centennial year, shudder at the recollection of the florid doings in Pike's Opera House and in Edward Hungerford's *Men of Erie,* the nearest thing to an official corporate history of the road, the reader will search long and hard for an obscure mention of the Erie "excitements."

But the heirs and descendents of shrewish Jay Gould, a fairly numerous contingent in the worlds of society and finance, smile complacently at mention of the old gentleman, who emerged from the scandals with enough blue chips to establish a railroad empire which included, among its miscellaneous properties, the Union Picific and Missouri Pacific Railroads, the Western Union Telegraph Company and New York City's public transportation system.

OBSEQUIES OF THE LATE COLONEL JAMES FISK, JR.—THE FUNERAL PROCESSION LEAVING THE GRAND OPERA HOUSE, CORNER OF EIGHTH AVENUE AND TWENTY-THIRD STREET.

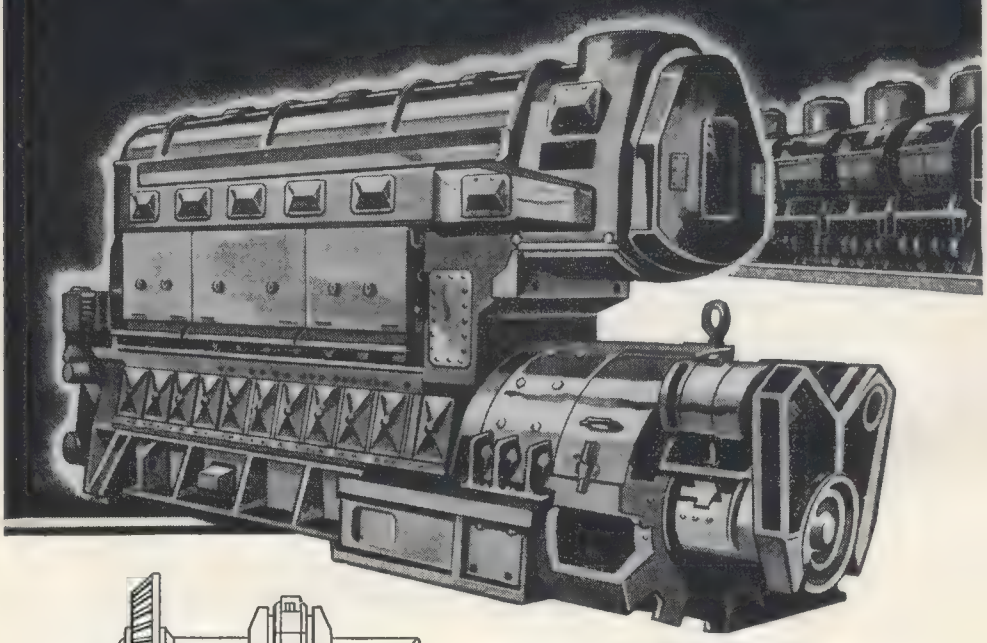
EX-GOVERNOR E. D. MORGAN BIDDING IN THE ERIE RAILWAY FOR SIX MILLION DOLLARS, AT THE REAL ESTATE SALESROOM, APRIL 24TH.

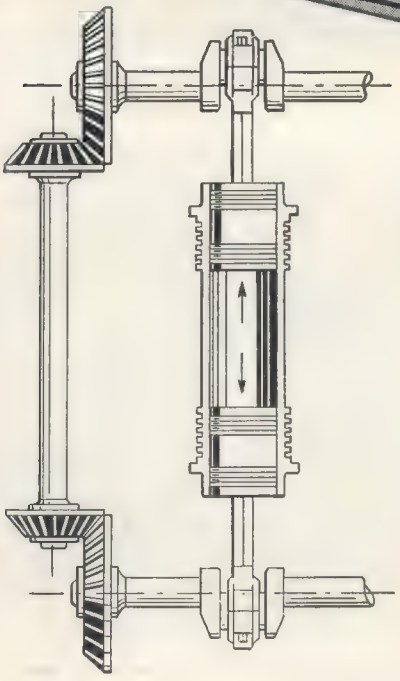
DANIEL DREW SELLING FIFTY THOUSAND SHARES OF ERIE STOCK AT "FIFTY-FIVE," SELLER'S OPTION, ONE YEAR.

SPECULATORS IN ERIE STOCK LOOKING AT THE INDICATOR IN DELMONICO'S, BROAD STREET, DURING LUNCH-TIME.

LIGHT OF THE LANTERN:

Diesel Engine Design





BECAUSE the Diesel locomotive uses electric traction motors, the question naturally arises: Why carry around a complete power plant on each locomotive? Where a railroad is contemplating complete Dieselization, wouldn't it be cheaper to electrify the road and set up stationary plants? The answer is that it would, insofar as the cost of producing electricity in large quantities is concerned. Unfortunately, this saving is more than nullified by the expense of

Cylinder arrangement of the *opposed piston* engine has two pistons sharing each cylinder, moving toward each other to produce compression and away again, and two crankshafts, connected by gearing and driveshafts in synchronization, as shown in the diagram at *left*

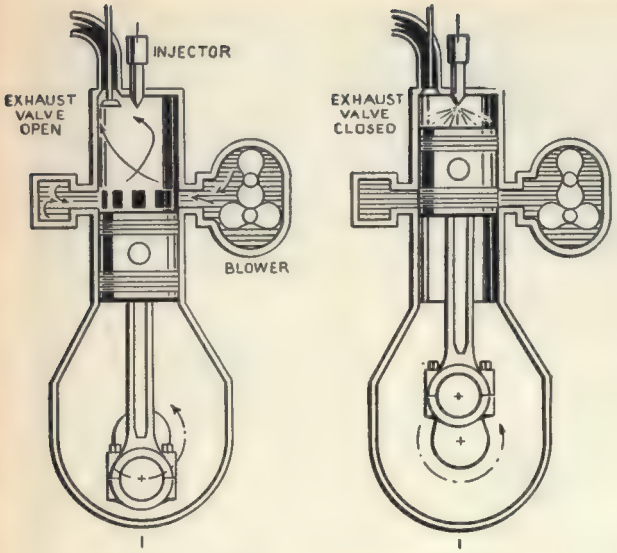
Every Diesel Locomotive Is a Complete Electric Power Plant, And to Turn the Generator the Builders Resort to a Variety of Engine Designs, Less Similar Than the Cowls Covering Them

DRAWINGS BY HENRY B. COMSTOCK

transmitting such power over great distances, and delivering it to the locomotives. Expensive substations and catenary, or third rail installations simply do not justify themselves unless traffic is unusually dense. Add the danger factor inherent with high voltages, particularly in yards, and the fact that every track, however little used, must have its trolley wire or heavily insulated and protected third rail, and the case for the Diesel becomes apparent.

In the first installment of this series of articles on Diesel locomotives we outlined the general principle of Diesel engine operation. We pointed out that unlike those of the gasoline engine, its pistons draw in air, instead of a mixture of air and fuel, and that the engine uses the heat of compression, instead of an electric spark, to create an explosion when oil is sprayed into the head of the cylinder. In short, the fuel is not vaporized to produce a combustible blend, but is broken up into a fine mist at the injector, and ignited by hot air.

As in the case of the gasoline engine, our Diesel may use any one of a number of cylinder arrangements. It can be an *in-line* engine, having the bores placed in a single row; a V-type, with two banks of cylinders inclined toward a single crankshaft; or an *opposed piston* engine, in which case two pistons share each cylinder, moving toward each other to produce compression, and away again, in response to the ignition of oil between them. This last type, naturally, requires two crank-



Conventional two-cycle engine, *left*, uses the walls of the piston to open and close air intake ports, eliminating intake valves and camshafts. In the case of the opposed-piston, two-cycle engine, *opposite page*, cylinder heads and exhaust valves are also unnecessary. Advantages of two-cycle engines are reduction of engine weight per horsepower, more even turning of the crankshaft, less parts to maintain, and slightly better fuel economy

shafts, connected by means of gearing and driveshafts to synchronize their action and unify the power output. *(See the first diagram.)*

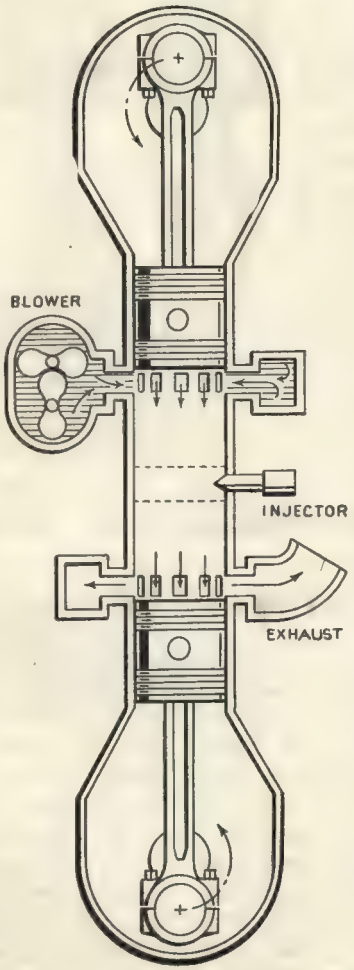
A further variance results from the use of the two- or four-cycle principle of operation. For the benefit of those unacquainted with internal combustion terms, a two-cycle engine produces one power stroke for each upward-and-downward journey of the piston—or complete revolution of the crankshaft. A four-cycle engine requires four strokes of the piston—or two revolutions of the crankshaft—for each power impulse. But in either case, four actions must take place: *suction,* or induction of a fresh charge of air; *compression* of this air; *expansion,* or burning of the fuel, and *exhaust,* or the ejection of burned gases.

Each of our Diesel locomotive manufacturers has selected a combination of the two- or four-cycle principle, and one or more of the basic cylinder arrangements just outlined, to produce what its engineering department believes is the most successful engine design. Alco, for example, offers four-cycle power plants of both the in-line and V-type; Baldwin is sold on the four-cycle, in-line engine; Fairbanks-Morse, on the two-cycle, opposed-piston design and General Motors, the two-cycle, V-type.

LET'S consider the principle of the General Motors (Electro-Motive Division) two-cycle engine first. For the sake of clarity we can forget the V-type feature and concentrate on the action within a single cylinder *(second diagram)*. Note that there is a blower on one side of the cylinder. Known as a *Root* type, it consists of two impellers with matching lobes, mounted in a housing which provides a number of passageways through the cylinder walls. As the impellers revolve, in response to the action of crankshaft gearing, they set air into motion, forcing a supply through the passageways. When the piston nears the bottom of its stroke, it uncovers the passageway openings into the cylinder and the pressurized air rushes in, driving exhaust gases out of the exhaust port, which has been opened by means of a cam. Then, as the piston moves upward, it covers the air slots again, and the exhaust valve closes, trapping the air and compressing it. Near the top of the compression stroke, fuel is injected under great pressure. Contacting the air, which has now reached a temperature of nearly 1000 degrees, it is immediately fired. This

forces the piston downward, to complete the revolution of the crankshaft and give us the entire sequence of events—intake, compression, expansion, and exhaust.

In many respects, the Fairbanks-Morse, opposed-piston engine may be regarded as two machines of the type just described, placed back to back. However, through the introduction of a second set of ports, opened and closed by one of the two pistons in each cylinder, cam - operated valves are completely eliminated. Neither are there any cylinder heads *(third diagram)*.



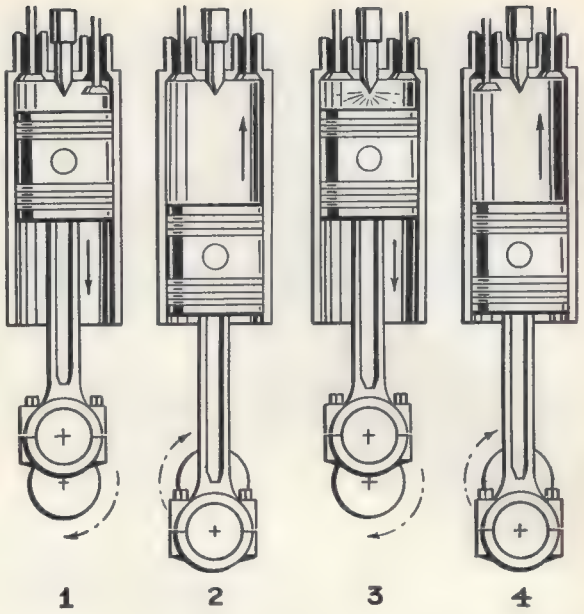
To trace the operation of the F-M engine, we begin with the pistons apart. All ports through the cylinder wall are open, and fresh air entering the cylinder cavity from the Root blower drives exhaust gases out through the second set of openings. As the pistons move toward one another the ports are closed and the air is trapped, compressed and heated. At the closest point of proximity, fuel is injected, resulting in combustion and the power stroke. When this is nearly completed the ports are uncovered again and the exhaust gases are again dispelled by fresh air.

In the four-cycle engine, as we have already noted, twice the number of crankshaft revolutions are needed to complete the operation. With this design air is taken into the cylinder as the piston moves down from the cylinder head *(fourth diagram detail 1)*. However, instead of using ports uncovered by the piston, we have a cam-operated intake valve, which is now open. Some engines are designed to let the suction of the piston, alone, draw in the air. Obviously this creates a drag and corresponding loss of power. To remedy the condition a turbo-supercharger has been developed which produces an intake pressure of close to 20 pounds. Unlike the Root blower, which is geared to the engine and therefore maintains an interrelated rate of speed, this supercharger has a free-floating turbine wheel turned by exhaust gases. Developing close to 12,000 revolutions a minute, it shows superior performance, and the horsepower of the engine is nearly doubled, thanks to the initial pressure of air which it creates.

Having reached the bottom of its first stroke, the piston moves upward again *(detail 2)*. The intake valve is now closed and the air trapped in the cylinder is greatly compressed. At the top of the stroke the fuel is injected and the piston moves downward for the second time, producing the power stroke *(detail 3)*. Traveling upward again, with the exhaust valve open, gases are ejected and the cylinder is ready for another series of events *(detail 4)*.

By observation it would seem that the opposed-piston engine is by far the simplest of the designs just outlined. In the EMD machine we must have one camshaft to operate each bank of exhaust valves. To these must be added intake valve camshafts, in the case of any four-cycle engine. Offsetting the advantage of eliminating such parts, and the possibility of their sticking or burning out, the F-M

Events of the four-cycle engine. Advantages over the two-cycle engine are reduced lubricating oil consumption, greater accessibility of parts for maintenance, production of about 10-percent more useful work per power stroke, elimination of scavenging pump to exhaust burned gases, and freedom from crankcase explosions



power plant does have an extra crankshaft. This in itself is not hard to maintain, but it creates a problem for enginehouse crews. Pistons and liners wear with use, and must be removed at periodic intervals. With other types of engines, a cylinder can be rebuilt while the locomotive is being serviced. But to remove a single cylinder liner on the opposed-piston engine, the entire upper crankshaft must be removed.

Information Booth

Q *What is the oldest portion of the Canadian Pacific Railway?*

A A stretch of about 8 miles, from Lanoraie Junction to Joliette, in Quebec Province, part of the original St. Lawrence & Industry Village Railway, first opened to the public on May 1, 1850, is the pioneer section of the rail lines of the CPR. Although the CPR was completed as a transcontinental line in 1885, and actual construction was started only 4 years previous, a number of smaller lines, such as the St L&IV were incorporated into the transportation network during the period of linking the two coasts of Canada. The original line is an integral part of the Beaver Route's St. Gabriel subdivision, which runs north from Lanoraie Junction on the St. Lawrence River to St. Gabriel in the Laurentian Mountains, a distance of 27 miles. Lanoraie Junction is just over 50 miles east of Montreal on the line to Quebec City.

When opened, the St. Lawrence & Industry Village was the first railway in Canada that was not a portage line. In other words, it did not run from one body of water to another to speed traffic, but serviced a town, Industry Village, or Joliette as it is known today, inland from the St. Lawrence River. The line was founded by Barthelmy Joliette, for whom Industry Village is now named, in 1847, but construction took 3 years. Five miles of the line, from Lanoraie Village to Lanoraie Junction, were abandoned when the Quebec, Montreal, Ottawa & Occidental Railway built through Lanoraie Junction in the late 1870s, but the original roadbed, even on the abandoned part, can be seen leading from today's Canadian Pacific line south to the river. The QMO&O acquired control of the 100-year-old line in 1880 and a year later purchased it outright. The purchaser then became the North Shore Railway and in 1885 was transferred to the Canadian Pacific for opera-

tion. The first locomotive in use on the line was the *Dorchester,* built in 1835 by Stephenson in England, and first used on the Champlain & St. Lawrence Railroad, the first railway in Canada.

* * *

Each month the Lantern Department prints answers to rail questions of general interest submitted by our readers. We do not reply by mail.

Q *Someone told me the Union Pacific operates some department stores, but I doubted him. It's not true, is it?*

A What your informant probably meant was a UP *department store* on wheels, with non-paying sectionmen as the customers. These stores are minus escalators, elevators or floorwalkers yet they carry some 700 different items vital to the operation of the 10,000-mile UP. *Customers* are located in big cities, little towns, and insignificant, out-of-the-way s i d i n g s.

Shortly after 1900, the UP decided that the most efficient way to get supplies into the hands of the track maintenance workers would be to operate special department store trains right to the men. Today, two trains serve 300 section crews and station forces, plus bridge and building, water service, and signal department workers in Nebraska, Kansas, Colorado, Wyoming, Montana, Idaho, Washington, Oregon, Utah, Nevada and California.

There's no refund department in these stores, the Union Pacific's supply trains for maintenance workers in 11 states. One operates out of Omaha, the other out of Pocatello, Idaho, taking supplies right to the trackmen
Union Pacific

One train operates out of Omaha and serves the Midwest, while the second, headquartered at Pocatello, Idaho, takes care of the Far West. The two serve 150 points. When the Omaha supply train pulls out on a run, say to Ogden, it includes about 30 cars, some empty, to hold worn and broken items. Eight cars carry, respectively, tools, oil, supplies for the sectionmen, construction workers, signalmen and station agents, a crane for picking up scrap metal, and miscellaneous items in two cars. The oil is in a tank car and the crane on a flat, but the others are modern passenger-type cars converted from steel coaches and diners.

In one working day the supply train makes in the neighborhood of 15 to 20 stops, no one stop being more than 10 or 15 minutes. E a c h car is manned by a crew member who has laid out in advance the items for each stop, where he passes the material through the doors to waiting sectionmen.

When the last tamping bar, broom or gallon of oil has been meted out, the engineer gives two fast toots on the locomotive whistle and the train pulls out, not to return again for two months.

* * *

Q *Recently you gave some information regarding Canadian National troop train movements out of Halifax, Nova Scotia, during World War II. Could you supply any figures on the New York Central's West Shore Division operations out of Camp Shanks, N.Y.?*

A During World War II, some 2,500,000 troops were moved from this embarkation camp to New York City, by train and ferryboat, for eventual distribution throughout the port for sailing on Europe-bound transports. The troop movements required exact timing, so as not to conflict with the operation of the heavy freight traffic that had to be handled at the same time. The heaviest single operation occurred in April, 1944, in anticipation of D-Day, when 37 twelve-car trains were used in one day, for the 21-mile trip into Weehawken Terminal.

* * *

Q *Please print a brief history of the Texas Western Narrow Gauge Railroad.*

A The pioneer narrow-gage railway in the Lone Star State, this three-foot pike was chartered on January 18, 1875, by Houston business men. Among these promoters were W. D. Cleveland; S. K. McIllheny; Brown Botts and T. W. House. Projected to extend from Houston to the Pacific Coast, or at least to El Paso, the Texas Western was opened to Patterson, a distance of 41 miles, on April 23, 1877. The first 10 miles cost some $8,000 per mile to build and equip. The expectations of the promoters were not realized, for while the Texas Western traversed a rich section, it could not live on its local traffic alone and it couldn't get any of the through traffic from or to Houston as it connected with only one of the Houston roads—the Galveston, Houston & San Antonio. Soon forced into receivership, the Texas Western was reorganized in 1880 as the Texas Western Railway Company. On its board of directors was ex-President Ulysses S. Grant and his son, Frederick D. Grant. The road was extended 15 miles further to Sealy, in 1881, giving it a mileage of 57 and a connection with the Gulf, Colorado & Santa Fe. However, the Texas Western was still unable to participate in through traffic as its new connection was a standard gage road. The new owners were not able to raise funds to extend the line further westward. It was finally purchased for $200,000 by Colonel Elijah Smith of Portland, Oregon, who managed to keep the road going until 1899, when it was abandoned. The grade and right-of-way was later acquired by the Missouri-Kansas-Texas Railway of Texas and used for most of the distance from Sealy to Houston. Many Houstonians remember the road. Paul B. Timpson, president of the Houston Land & Trust Company, recalls that the depot was at the corner of St. Emanuel and Commerce Streets, and that the line ran out St. Emanuel to what is now East Alabama. An annual excursion was run by the Texas Western to Emancipation Park in the south end of the city on Emancipation Day. The road had only a few coaches and used flatcars for these excursions.

* * *

Q *Where do the Norfolk & Western's streamlined Class-J 4-8-4s stop for coal and water on the 676.6 mile run between Norfolk and Cincinnati?*

A. On the westbound run, from Norfolk to Cincinnati, the first stop for water is made at the Crewe, Virginia passenger station, a distance of 128.8 miles from Norfolk, and the first stop for coal is Roanoke, 123.5 miles beyond Crewe, and 252.3 miles from Norfolk. Between

Norfolk & Western

No Diesels, please! The Norfolk & Western Railway introduced its first streamlined locomotive, coal-burning No. 600, more than a decade ago, from the Roanoke Shops. The Class-J engine has hauled passengers close to 1,700,000 miles for the coal-vested road

Roanoke and Cincinnati, a distance of 424.3 miles, water is normally taken at Bluefield, West Virginia, 100.9 miles past Roanoke, and at Pritchard, West Virginia, 159.4 miles further west, or 260.3 miles beyond Roanoke. The second stop for coal is also made at Prichard, 512.6 miles from Norfolk. On eastbound runs, water is taken at Prichard, 164 miles east of Cincinnati, and at Bluefield, 159.4 miles past Prichard, and 323.4 miles out of the Queen City. Coal is also taken on at Prichard. Passenger trains of heavy consist take water at Sardinia, Ohio, 53.1 miles east of Cincinnati.

By the way, the Class-J 4-8-4s are holding up quite well in the decade and a half since the N&W first introduced these coal-burning streamliners. The first one, No. 600, came out in 1941. For two weeks the sleek, glittery black, Tuscan red-striped, gold leaf-lettered steam engine pulled streamlined passenger equipment on exhibition tours over the road. Then, in the intervening decade No. 600 racked up 1,620,000 miles.

This first Class-J engine was followed by four more 600s from the Roanoke Shops in the next three months. Then six in 1943. And three more in '50. The original design had no bugs, so the three built in 1950 embodied only superficial changes. The N&W, one of the few roads still sticking to steam engines, has 14 Class Js performing yeomanly along the varied terrain from Hampton Roads to the Midwest. With coal right at its door, the N&W doesn't have to Dieselize.

Q *Please give me a description of the British Railways two-deck suburban cars. Is there any such passenger equipment on the European continent?*

A On the European mainland, double-deckers have been employed with success, notably on the French State and Western systems and on the Lubeck-Buchen road in Germany. On the French State Railways, two-deck cars each accommodating 115 seated passengers, appeared in 1933, while on the French Western Company, two-deckers, each providing seats for 76 passengers, were introduced as long ago as the close of the last century. The Lubeck-Buchen two-deck stock dates back to 1935, and in this case each car seats 150 passengers.

Late in the summer of 1949 the first two-deck passenger cars began operating in England on the busy electric suburban routes of the Southern Region of British Railways, between London and Dartford, Kent. Two-deck passenger cars had not been operated in Britain previously, largely because of station platforms being higher and loading gages more restricted than in most other countries.

The British design is a complete breakaway from other European patterns, and also from the Long Island type of two-deck car dating from 1932. Measuring 12 feet 10½ inches from rail level to roof top, and having an exterior door for each 22 passenger seats, the British two-deckers are made up into trains of 8 cars each. Working on the familiar multiple-unit arrangement, the motor cars each seat 55 passengers on the lower deck and 55 on the upper, plus 10 additional seated passengers on the upper deck at busy periods, giving a total of 120. On the trailer cars, 78 seats are provided on the lower deck and 66 on the upper, plus 12 extra seats on the upper deck at peak periods, giving a total of 156. With a 62-foot, 6-inch underframe and a driver's and baggage section, the motor car carries 5 lower and 5 upper passenger sections by a clever arrangement of interlacing. The trailer car, with a 62 foot underframe, has 7 lower and 6 upper passenger sections.

General arrangement of the interiors is

Gunter Stetza, Henricistrabe 71, Essen, Germany (British Zone)

Doubledeck passenger cars have been used successfully in England, France and Germany. This streamliner with a pair of two-deckers travels between Hamburg and Hasselbrock

Guy G. Sandus, 1238 Holley St. N.W., Atlanta, Ga.

Gainesville, Ga. is the United States' second largest broiler center, so why shouldn't the Gainesville Midland like the fowl trade?—the cab emblem is a baby chick bursting out of its shell. The locomotive, a *Decapod* sold to the line by Seaboard upon Dieselization, has often been seen pulling 33 cars, at least 1750 tons

the same as the arrangement of the trailer. In the 7 lower or platform level passenger sections, the 3 sections at each end have 6 seats on one side. On the other side, there are 3 seats and 2 seats respectively, separated by steps leading to the upper section, which has identical seating. The center passenger section seats 12 passengers, 6 a-side. Interlacing of the passenger sections in the British two-deckers is achieved by curving the roof outwards above each lower seat so as to accommodate the upper section seat. This has the effect of curtailing the baggage rack space in the lower sections, but in the upper sections there is liberal space for packages at the backs of the seats. In both lower and upper passenger sections, ample headroom is provided. One of the 8-car trains, formed of 4 motor and 4 trailer cars, carries at least 1104 passengers. On top of this, at peak periods, it provides for 6 standing passengers in each section, giving a total train load of 1656. This compares with the 776 seats given in the 8-car trains of standard suburban stock. In all older designs of doubledeckers—A m e r i c a n, French and German—end loading and unloading was employed, involving the use of a single exterior door by 60 to 70 passengers. The British design, with its exterior door for every 22 passenger seats, makes for speedier unloading. In the London-Dartford service only 20 seconds is allowed for intermediate station stops. Cost of the British two-deckers is roughly half-as-much again as that of the conventional car. In the construction of the two-deckers, standard electric suburban set underframes, buffing gear and trucks are employed. Features include fixed windows in the upper deck, owing to close clearances of bridges and tunnels, with electric fans to provide adequate ventilation; grab handles so placed as to assist movement between the two decks, and strip lighting over all seats to prevent interference to reading travelers from shadows caused by passengers moving back and forth inside the car.

THE GENERAL MANAGER'S

WHEN I worked on the railroads out west, the state of Oklahoma was still Indian Territory and had, as citizens, plenty of much-wanted desperadoes from practically every state in the union. This was the reason the famous Texas Rangers made the section around Quanah their headquarters. Quanah was a small town with only a few hundred inhabitants, a few saloons and stores, a bank and a post office, and of course the railroad station. One thing I noticed, no one wore a six-gun or at least didn't do so openly as they had at Dodge and even in

STORY

PART II

By E. G. BURDICK as told to Bill Knapke

Fort Worth. I soon learned the rangers wouldn't permit it. A cowboy could wear his gun into town but had to deposit it with some barkeep or merchant until he was ready to depart. Yep, the rangers were the law and what they said went.

A mighty nice chap named Tommy Reese was the night operator and he and I became very friendly. One afternoon Tommy suggested we rent a couple of horses from the local livery stable and take a ride to the Red River. Tommy was a native Texan; he knew horses and I thought I did too, having ridden the

work plugs at the lumber mill in New York. So we set out, astride a couple of cow-ponies, the first time I'd ever been on one of those critters. As we rode along my pony kept veering to one side or the other, apparently without reason. It peeved me and I started yanking him back in line. All at once he lit out running, evidently understanding I was a greenhorn; he kept right on veering right and left and running faster and faster right up to the river bank, where he stopped as though nothing had happened. Tommy came riding up with a broad grin on his face and asked what was the matter. "Durned if I know," I said. "This horse isn't as gentle as the livery man said, that's sure."

Tommy nearly laughed his head off. "No, the trouble is the way you rein him. These ponies are never reined—just hold the reins loose and whichever way you move your hand, as soon as the rein touches his neck he moves to the opposite direction."

Well I tried that going back, and by golly it worked fine.

Those Texas rangers had no small undertaking in their efforts to maintain law and order, and while it seemed to me there could have been closer supervision on some points, they did a wonderful job. Some of them were inclined to drink quite a bit and their general hangout seemed mostly in the red light district, yet they were always on the job in the performance of duty. They never stayed in one spot for any length of time, and I thought the reason for that was to keep the outlaws guessing as to their whereabouts.

The captain, McDonald, was a large, well-built man of middle age with a mustache touched with gray; very quiet and of few words. He stayed around our office a lot and seemed to take quite a liking to me. He took me around with him some, but even then had little to say. I can't remember ever hearing him laugh or even smile and the dignity of the man impelled you to keep your distance. He was never without two gold-mounted Colt revolvers strapped around his waist. He once told me that he wouldn't have them except that they were a gift.

I don't remember that he named the donor, but I've since wondered if it wasn't the Colt Manufacturing Co., as all the rangers carried Colt revolvers in their holsters. Each ranger had two horses and when they were on the move each had a Winchester rifle in his saddle scabbard. Also, each was allowed a negro servant to care for his ponies and do any other tasks desired. One time when several of the rangers returned from a scouting trip, I noticed that a certain Negro servant, whom I had seen leave with them, did not come back with the troop and I asked a ranger if the Negro had quit.

"Oh, that fellow," said the ranger, "He was a sulky, mean sort and the fellows were always teasing him. We wouldn't have had him around except that he was exceptionally good at handling the ponies. Anyhow, one of the fellows got him so worked up and mad that he raised his shotgun to shoot the fellow that was razzing him. Luckily another ranger saw him just in time. We buried him there."

Perhaps a callous outlook, but it must be remembered that these rangers went in daily peril themselves and the taking of a life was a matter of little moment to them. I had a personal experience along that line with a ranger I knew well. I've never been able to figure whether he wanted to teach me a lesson or if the play really was as it seemed. This ranger hung around the station quite a bit, not inside as did Captain McDonald but out on the train platform. One day, just as a passenger train was about due, I was out on the platform and this ranger came around the corner of the building just as I straightened up and shoved both my hands in my back pockets. Boy! Quicker'n a wink he had me covered with both his Colts, but dropped 'em hastily when he recognized me.

"For the love of God, don't ever do that again," he said, "I came within a wink of killing you. It looked like you were making a gun play at me."

I guess it did at that, and you can bet

that I was careful how I used my hands thereafter when one of those boys was near. Had he shot me it would have been merely a case of, "too bad." Oddly enough, when I left Quanah a few months later, that same ranger gave me what I suppose was one of his priceless possessions—one of those same Colts, white handled and with three notches cut therein to denote the number of unlucky guys that it had sent across a wider river than the Red.

Captain McDonald got me several bawling outs from train crews and I've come to the belief that he was having a little fun at my expense. For instance, he'd stand around in the telegraph office, rarely sitting down, waiting until the limited passenger train that did not stop at Quanah was over the east siding switch, and so close it was impossible to stop it at the station. Then he'd say, "Burdick, stop that train." I'd throw the order board right in the engineer's face. The train would slide by, then back up. Into the office would bolt the engineer, frothing at the mouth. "What d'ya mean throwing that board right in my face?" he'd yell and mebbe make a pass at me through the ticket window. I'd just motion to the captain, "Tell it to him," I'd say.

The captain would ignore the skipper and hogger and address me. "Have them pick up that stock car with two ponies in it from the house track and take it to Amarillo." I'd repeat the order to the conductor and the car would be picked up without demur. Captain McDonald would also remark, "The boys will ride in the chair car." No message, pass or other authority was necessary. The rangers had full authority under the law to do that.

TO SHOW to what extent the enforcement of law by the rangers reached, I will cite the fact that at flag stations along the FW&DC where there were no station buildings, posts three or four feet tall with a box nailed on top served the purpose of post office, bank, etc. Letters, money or valuables were left in them to be collected by the passenger train that stopped there and I never heard of a single case of pilfering. Thieves had very little chance of escape in that country. There were only two ways out—by train or by horse. There was no place the horse could take you and the train was a cinch for the rangers.

There was a prairie dog grounds right on the outskirts of Quanah and the lone church, of which I do not remember the denomination, was located right in the center of the "school." As we'd approach to attend service (Yeah, don't fall dead but I really attended service) the little dogs would sit right at the edge of their holes, bark furiously and when we got too close they would dive into their holes pronto. It was said that the small prairie rattle snakes occupied the holes with the dogs. I've often wondered if that was true. I've seen a snake go in one of the holes or come out of one, but I never saw a dog at the same hole.

One of the Quanah lads once brought me a prairie dog puppy. It was much like a rabbit, with pink eyes and white fur and was wild as anything if you attempted to pick him up, but friendly as long as you kept hands off. He nipped me several times when playing on my desk and I'd push him away from the inkwell, into which he was forever sticking his feet and then tracking over papers. Howard, over at Amarillo wanted him as a gift to a girlfriend, so I sent him over there though I rather hated to give the little cuss away. That's one thing I'll always remember—the barking of that dog school, hundreds and hundreds of them all going at once. It was bedlam.

Once in a while Jim Howard would get a chance to come and see me and several times I went to Amarillo. The agent there was a mighty nice chap named Harrington with a brother who was a passenger conductor on the same district. This conductor's train was held up by bandits and the skipper battled it out with the robbers, killing the leader of the gang and driving the rest of them away. Naturally, Harrington was proud of his nervy brother.

The hotel I stopped at while in Amarillo is worthy of mention. A man whose name I can't recall had a large amount of vacant property on which he wanted a town located, and so arranged for the removal of every building to his townsite by donating free lots to each resident and also moving the buildings free of charge. Thus the entire town of Amarillo moved from its original location to where it now stands. Prior to moving the town this man had built the four-story hotel. It was a darn nice hotel, too, for that location and time. I remember the bar extended the full length of the barroom and was presided over by a barkeep who one time told us that he never ate breakfast until he'd drunk 35 whiskies.

A few months after I sent the prairie dog to Jim, he suggested that it was about time for us to go back home for a visit. I agreed and we arranged an approximate time for each of us to ride a stock train to Denver where we would meet and journey home together. This was at the time of one of those rate wars between railroads when a ticket from Denver to Chicago could be purchased for six dollars. Anyhow, we each rode a stock train to Denver on different days, but somehow we missed connections and never did meet. Jim decamped for the East alone and I gave up the idea and resolved to get a job on some road out of Denver.

I had been lugging that big, heavy .45 Colt the ranger gave me and a large, airish hole in my rear pants pocket was the result; so when I went into Superintendent of Telegraph F. M. Duncan's office I had to sidle in, keeping my back to the wall because my short blue pea jacket couldn't be pulled down far enough to cover the aforementioned ventilator. Well, I made it and got a job as Milikin Repeater expert, being sent to Salida, Colo. where the repeaters had been giving a great deal of trouble.

I was to fix these gadgets and keep them in operation. All I knew about the things I'd learned at Fort Worth, and I was running a big bluff when I went to Salida. But much to my surprise I succeeded in getting the repeaters to work smoothly and stay in "balance". While I was at Fort Worth I had heard the repeater man there say to someone, "The whole secret of keeping these things working is battery. It's generally supposed that 8 cells of "crow-foot" battery will carry 'em okay but I've learned that's not true. Sometimes they will, but more often they won't. I've learned to add two more cells and I don't have any trouble."

I figured the fellow really knew what he was talking about, so the first thing at Salida I went in to the battery room and checked the number of batteries on that circuit. Sure enough there were just 8 cells. A lineman was working in the room and I told him I wanted two more cells on that circuit. As I expected he balked, saying, "Eight cells is what the manufacturer says and eight cells is all it gets." I suggested we see the office manager, which we did, and while he suggested that I was goofy he wound up by saying, "What's a couple of cells of battery, more or less, if it'll make him happy." So on went the two additional cells, with a disgruntled lineman doing the job and prophesying all sort of evil happenings to the "peters". Well, I went back to the machines and watched 'em doing their work. There are quite a number of places to adjust on these machines, and I watched them and saw they were functioning properly.

They were used very little during daylight hours, but after 7 p.m. when the news wire, Denver to Grand Junction, started doing business, these repeaters in the Salida office took it off the through wire and sent it on the Leadville-Aspen branch wire. It really became hot movement and if it didn't get through, the Aspen office raised Cain with the manager at Salida and the Associated Press people would go further than that—they'd jump on the superintendent of telegraph in Denver.

BELIEVE it or not, I never had a bobble with those machines, and naturally everybody was tickled pink. Even the lineman, with whom I had the argu-

ment over the batteries, complimented me and said, "There's sure a lot of difference when a real expert like you takes over." "Real expert!" That was a laugh, but I never saw the old adage, "A closed mouth makes a wise head" better exemplified.

However, I was the one that got the hot end of the poker on the deal, for while operator after operator came and left the Salida office, thus giving me seniority enough that I was entitled to a job with better hours, the manager persuaded me to stay on the repeaters. Finally I became so insistent that they sent a man from Denver.

This chap was from Sedalia, Mo. off the Missouri Pacific. Sedalia at that time was a leading railroad center and the Mo-Pac used lots of repeaters, so I thought this fellow certainly must be an expert. At least he was so reputed, and he admitted it unhesitatingly. Anyway, my time had come for a day job and I was sure glad. You see, those were the days of 7-day work-weeks, no vacations except on one's own time, and then usually by reason of being fired and on the lookout for another job. Well, the new man reported for work and I took one of the messenger boys and hied off to a show. Shows were few and far between in Salida, so I anticipated a pleasant evening. But it was not to be. The performance hadn't much more than started when the management paged Mr. Burdick. An office boy had been sent for me with a note, "Please come to office and balance the repeaters."

The expert called me in again for a few minutes the next night, but as I remember it, that was all. The telegraph office at Salida was upstairs above the depot. The Denver and Rio Grande had originally been a narrow gage, but at the time I was there a third rail had been laid from Denver to Tennessee Pass, so both standard and narrow gage trains were operated except over Marshall Pass to Grand Junction. The latter, nick-named The Turkey Trail, was entirely narrow gage and had terrific grades and curves. I had never before and never expect again to view such grand, rugged scenery! Towering, snow-clad peaks pointing their frigid spires eternally at the heavens. Standing in serried ranks, peak after peak, each seemingly higher than the other. Great cliffs of granite, ascending for hundreds or thousands of feet, straight as a wall. Deep canyons where the sun never shone and shadows lay purple and mysterious. One gigantic, jumbled mass of nature's handiwork, through which the narrow gage rails wound and twisted and writhed their course to the eleven thousand, seven hundred foot summit at Marshall Pass.

Yes, it was difficult train operation; the little six-car passenger trains were split in two sections for the ascent. Two engines on the four-car section and one locomotive on the two cars. Freight trains were run with from four to six engines in a train, and they were short trains. Conductors were not allowed to bring more than 400 tons downgrade.

Despite the short trains and limited tonnage, wrecks were not infrequent. Broken car wheels from too heavy braking and runaways from failure of the straight air brakes were the most common cause. One stock train wreck occurred when a train parted and the rear portion overtook and collided with the head portion in a snow shed. The force of the impact shot a brakeman named Jack Hogstead right up through an air vent onto the roof, from which he rolled to the ground unhurt except for minor bruises. On another occasion a break-in-two and collision tore off a car roof on which a brakeman was riding, and said roof tobogganed fifteen hundred feet to the bottom of a canyon with the brakeman clinging to it. The man received practically no physical injuries but went insane from fright. This happened just above a station named Shawano.

As there were some eight or ten operators employed in the Salida office, we made quite a little coterie of our own and flocked pretty much together. Sometimes three or four of the night operators would borrow a pushcar from the section boss, tie it behind the caboose of an uphill freight train and ride the caboose to Mar-

shall Pass for a visit with the operators there. Then we'd ride the pushcar back down the grade to Salida. A piece of 2x4 or a strong sapling thrust through a hole in the car floor and pried against a wheel furnished braking power for a safe, easy descent.

That practice was in vogue at Salida when I arrived there and was continued after I left—that is, for awhile. I heard that a short time after I left the place, four young engineers decided to take a trip up the hill and do a little hunting. They not only took guns, but also a jug, contents not stated. They did their hunting, and when ready to return appointed one of their number as "brakemaster" and started down the grade. They kidded the brakemaster about slow progress, cold feet, etc. He answered their criticism very simply—he just tossed the brake sapling out into the weeds. Business immediately became very brisk. You don't turn a car loose on that kind of grade without something happening. What happened in this instance was four young engineers going to the hospital, all bunged up, and the prohibiting of any more pushcar excursions to Marshall Pass.

R. M. RIDGEWAY was division superintendent at Salida. "Old Tige" was his nickname, and it sure fit. A couple of his sons were assistant supers and a fellow named Barnes was trainmaster. (The latter was still alive and residing in Denver a couple of years ago. Also one of the train dispatchers there, Frank W. Livesley, now lives in Los Angeles and I hear from him once in awhile. He is 86, I believe.) In addition to the eight or ten relay operators already mentioned, there were two sets of train dispatchers who were located in a different office than the relay men. In the office with the dispatchers was an operator named Jay Parsons whose job was to handle rush messages that might otherwise be delayed in transit through the relay office. This Jay was a mighty high-grade operator and he and I roomed together at Mammy Deegan's boarding-house. Several other operators, one dispatcher and also a trainman roomed there as well.

Parsons was sent on a relief job to Ouray and Telluride on the Otto Mears Railroad and when he departed he borrowed my Colt .45 to take along. When he returned he handed me a fine new Smith & Wesson revolver he'd traded my Colt for. He really thought he'd done me a favor. "No Jay," I said, "You may keep the Smith & Wesson. The old Colt was a keepsake and I'm really sorry about its loss, but I never told you its story, so it's okay." Jay was very put out about the trade but there wasn't a thing that could be done about it.

While Jay was away, I filled his job in the dispatcher's office and it gave me quite a bit of experience with Old Tige, whose office was next door. There was an extra typewriter, and I began fooling with it and eventually typed a few short messages. They had to be short or I would have found it necessary to "break" the sender due to my inability to hunt and peck fast enough to keep up with the telegraph instruments. When I placed a couple of these typewritten messages on Old Tige's desk, they were promptly returned to me with the admonition to cut out the monkey business or I'd be leaving half the message uncopied some time. Little did Old Tige think (or me either) that in a short time the typewriter would entirely supplant the stylus and pen in telegraph offices. But Mr. Ridgeway was no more shortsighted than anyone else. Western Union would not countenance the use of typewriters for a long time after they had been adopted by other companies, principally because there were few operators proficient enough to use a machine and yet keep their minds on the click of the sounders, with absolute accuracy.

One of the most tragic and shocking incidents I ever witnessed occurred during the time I worked at Salida. Coal was being stolen from the railroad cars in the yards and finally the thefts grew to such proportions that the master mechanic hired a night watchman to guard the coal pile. The watchman was a young chap

The "brakemaster" tossed the sapling out into the weeds and business immediately became very brisk

just out from the East and was a brother of the city marshall. He caught the thieves, who proved to be Slav laborers employed by the railroad and who were stealing the coal for their own use. When the thieves were cornered they promptly ganged up on the watchman and gave him a severe beating. The next night he went on duty armed and when the same gang undertook to beat him again, he shot and killed one of them. He then went to the city marshall and surrendered himself.

News of the happening spread rapidly and as is usually the case in such an event, exaggeration distorted the actual facts into something altogether different. The fact that a life had been taken for so small a matter as the theft of a few sacks of coal incensed the citizens beyond all reasoning. They knew nothing of the beating the young fellow had received and their ignorance, plus the loud-mouthed haranguing

of the trouble makers, led them to mob action that was later the cause of bitter regret to the majority of the men involved in this shameful affair.

We were sitting at the table eating when the trainman I mentioned above came rushing in the house and up to his room, then hurried down, strapping on his revolver. As he went out, he said, "There's going to be a lynching uptown." We at the table were excited, especially me, and most of the men got their hats and tore out to see the excitement. I was a bit dubious about getting mixed up in the affair, but I followed, alone and at a distance as I was really uneasy as to the course events would take. I had not gone very far before I heard the sound of shots apparently coming from the direction of the calaboose.

Then there was another volley from that direction and soon a gang of men came running along the street dragging the young watchman at the end of a rope. The mob ran down Main Street almost to the center of town, then turned left for a block to where the Villa Grove branch of the railroad crossed that street. At the crossing the rope was tossed over the crossarm of a telegraph pole and the victim drawn up until his feet were some distance from the ground.

The body was left hanging until late next day before being cut down. It was a horrible sight, the face blackened, skinned and full of dirt and gravel where he had been dragged along the ground. Don't think the marshal and his deputies didn't resist for they did put up a real fight until overwhelmed by weight of numbers. Several of the mob were wounded by bullets, one of the most prominent being the general yardmaster, Blondie Wilcox, who not only was severely injured but was, after release from hospital, discharged by the railroad company as were several others. That was the only lynching I ever witnessed and needless to say I never want to see another. I'll freely confess that I was terrified at the time. These things happened in Salida during the years 1890 and 1891.

DURING the latter year a change in managership of the telegraph office occurred and the "gang" suggested I apply for the position, which I did. Mr. Duncan replied to my application promptly. His answer read, "Any official would hesitate to promote to the responsible position of office manager an employe who has been heard to say, "Anyone who didn't do up the Western Union, if he had the opportunity, would be foolish.' " So that settled that. I remembered an occasion when I had foolishly made such a remark in the presence of a chief lineman, in whom all the operators had complete confidence. Of course, the remark was simply a case of talking to hear myself talk and was inspired by the case of an office manager and his wife, both of whom were operators at Grand Junction, Colo. I can't recall the name but the man, without his wife's knowledge, gambled with and lost the Western Union receipts. He was caught and as was customary in those days, allowed to work out his debt instead of being prosecuted in court. Despite the example he had just witnessed, darned if our own Salida manager didn't go haywire via the gambling route; he skipped out and was caught, brought back and put to work, the Western Union withholding a certain amount from each pay check until the loss was made up. Corporations sure handled such cases far differently then than they do today.

It was some time in August 1891 that I moved out of Salida—I don't remember the reason now. Probably another case of the old foot itch. Nor can I remember if Jim Howard was still at Grand Junction at the time I passed through, enroute to Salt Lake City, Utah. Anyhow, the chief dispatcher at Salt Lake City somehow learned there was an operator aboard the train I was on, and he wired me saying he needed an operator at Thistle Jct. He requested that I help him out by working the job for a few nights until he could get a man. Of course I did, and, my gosh, was that an out-in-the-sticks station! There was a sandwich stand in the depot but no place where real food could be had.

I walked three miles daily to Castilla Springs to get a square meal.

I had been at this place about ten days and was getting anxious to be on my way, but I didn't like to just walk off and leave 'em flat. Talking on the wire with Ogden one night, I learned there was an opening in the relay office there, and I began to fret and wonder how I could get away from Thistle in time to land it. About the time I had reached the blowing up point, the division superintendent's business car was set out at Thistle to make connection with the branch train. When the agent relieved me at 8 a.m. I made known my desire to get to Ogden and said, "Wonder if that super out there would do anything for me?" "Fat chance," said the agent, "You'll have to think of something better'n that." "Well, he can't hang me for asking," I replied. "He's just finished breakfast and maybe he'll be in a good humor."

So I went to the car and told Superintendent Welby how I had stopped there as an accommodation, that I had the promise of a good job at Ogden, that I had stayed this long because I didn't want to walk off and leave the place without and operator, etc. and by golly it worked. He called his secretary and told him to write me a pass to Ogden and to wire the chief to have a man there that night for relief.

When I reached Ogden, the first move was a shave and I can remember it to this day, my face felt so good. At about 10 a.m. I was just walking into the doorway of the chief's office when I was met by one of the operators coming out. He noticed my ORT pin and said, "If you're going in there looking for a job, ditch that pin. This manager will not hire order men. Nearly every operator in there belongs, but we all keep quiet about it." So I took off the pin before going in. The manager, Davey Cashmore, a Mormon boy, came to the counter to meet me. "Hiring any operators?" I asked. "Yes. Come right in and sit at this desk. This operator has thirty minutes for lunch. This is the Salt Lake circuit and if you can handle it, you're on the payroll."

This Salt Lake wire was just 37 miles long but it was sure hot. All the stuff from the Oregon Short Line general offices came over it to Ogden, where it was put on the Ogden to Omaha duplex circuit. The Salt Lake man, Harry Clark, was fast as the dickens but sent good clear Morse that I had no trouble keeping up with. I didn't have to break him a single time. After a while Davey came over and said, "Okay. Come over to the duplex and relieve this man for lunch." Gee! The receiving side too. The darn wire was working rotten and when I'd have to break because I couldn't get the stuff, it meant all four operators were tied up. As receiving operator I'd have to tell the sender at my left to tell the guy in Omaha to tell the lad next to him that I wasn't getting it and to go ahead from such and such a word. So you see that kind of business couldn't last very long. The fellow next to me was an oldtimer named George Maryfield. He said, "Suppose you take this seat. I can guess that guy better than you can." So I slid over on the sending side, which undoubtedly saved my job in that office. After that I got along fine.

Back in New York state I'd heard of Mormons, of course, and very little good of them either. None of it had made much impression on my mind, but when I suddenly became implanted in their midst I was naturally curious to learn what sort of folk they were. Well, it didn't take long to find out that they were the finest of the fine in every way. The office manager, Davey Cashmore, was a Mormon as were several of the other operators, and all of them were first class operators and first class guys as well. Davey was a small chap, a high-grade operator in all respects except that of handwriting. He was a fast copier but his copy didn't look like copper plate, by a long shot. In those days, good, legible writing was essential, as well as high speed, and I found all those lads in UP's "OG" office qualified in both respects.

There was one chap there, an Easterner and also a cripple, who had come to OG

from the Santa Fe. He was a couple of years older than me but we became close friends and roomed together for quite a long time. He finally left Ogden, going to Albuquerque to assume the managership of the office there. Somehow, at Albuquerque he had gotten into the saloon and gambling business and later was in the same line at Yuma, Ariz., where I happened to meet him again during 1908 or 1909. Later I hired him as an operator and put him to work in Mexico. However, he couldn't stand the tranquility of his old occupation, and after a few months he quit and went back to dealing at the gambling tables in the famous "Owl" in Mexicali. As is usual with followers of the game, he ended with the "Poor Farm" and "Potter's Field".

I know of no one office from which as many outstanding railroad men came as that "OG" office. W. H. Bancroft was there as general superintendent, E. E. Calvin, Edward Manson, H. V. Platt and many others passed through that office to higher official rank. In that building were located Southern Pacific officials and dispatchers as well as the Union Pacific outfit. I remember that my friend, Al Wright, who was an SP dispatcher, and I, would hand messages back and forth through a window to save transmitting them on the wires. Al later became trainmaster, then assistant superintendent, and during the building of the Lucin Cutoff, broke down from overwork and had to quit railroading. Later he began selling life insurance and became the general agent for his company in Salt Lake City. He retired a couple of years ago, though he still continues selling and driving his own car, at the age of 85.

Another man at OG was S. W. Knapp, later a prominent official of the SP. Old Larry Malloy was UP superintendent at Cheyenne, Wyo. and Garret O'Neil at Evanston. Garret still spoke with a decided brogue of the "Ould Sod" and he wasn't a bad chap at all. He had come up from the track department. I remember once, after I had transferred to and was in the yard office at Ogden, Garret looking over my shoulder and reading a message relative to the "Coxey's Army" affair. Coxey's Army had been congregating in and about the SP-UP railroad yards for a couple of weeks and it had been arranged for the "army" to walk or catch rides to Uintah on the UP, where they were to "capture" a train of empty box-cars that would transport them to Omaha, one thousand miles—anything to get 'em out of Ogden.

I had no idea then in 1891 that I would live, move, have my being and marry in Ogden during the next fifteen years. As I said before, my association with the Mormon folk was always pleasant and though my religion was different from theirs, I was admitted to many places from which Gentlies in general were barred. Mormon cities and towns are divided into wards and in each ward, adjacent to its church, was an amusement hall in which various types of entertainment were offered—dancing, singing, etc. If I went there, accompanied by some Mormon friend, I was always made to feel welcome and at home. These amusement halls are, in my opinion, outstanding because of the young folks having a place to meet, be entertained and all under careful supervision. Too bad that some other religious sects do not have the same thing.

Continued next month

Coming Next Month:

Annual Speed Survey

Once again Don Steffee's famed yearly report shows how the fast passenger runs shape up around the nation

NOT ON THE WHEEL REPORT — *Joe Easley*

"I warned yuh it'd be harder going back!"

Street and Interurban Railways of 1952

STEVE MAGUIRE

SINCE our listing of operating street railway and interurban lines in 1950, so many changes have occurred in the field that a revised listing is now in order. Unfortunately, the changes are far from our liking. There is no question but that local transportation, generally, is in a desperate state. Autos, television, decentralization of urban areas and many other factors have caused a great decrease in the use of local transit properties. As we pointed out last month, an example of what has happened in the transportation business was forcibly shown in the case of the West Penn Railways. This company originally planned on substitution of buses for its interurban lines, but later changed its petition to complete abandonment of its railway lines. Business is so bad that the company doesn't want to operate any transit vehicles—buses or interurban cars.

As the year 1951 came to an end three more states and one Canadian province were added to the increasing list of those without trolley lines. In Montana the Anaconda Copper Company's street railway system gave way to buses. This line operated the oldest passenger cars in the U. S., some of the cars having been built in 1902. In Alberta, the Calgary Transit and the Edmonton Transportation System also were converted to buses, leaving no more trolleys in that province, though Ontario has eight lines. Colorado is out of the trolley field. The Fort Collins Municipal line was suspended for a six-month trial of buses, but it is practically certain that the change will be permanent and the little Birney cars will never run again there. In the South, the Piedmont & Northern line, operating passenger and freight trains in North and South Carolina decided to give up passenger service. On March 1, 1951 the NC Division passenger service ended, and on October 31st permission was given to quit the two 90-mile round trip passenger trains on the SC Division and the division was Dieselized.

Here is a list of operating trolley and interurban lines. It does not include heavy steam road electrifications. Lines which operate freight only are marked as (F), and those that are expected to be abandoned almost imminently are shown as (A). Mileages of each company are approximate in many instances since frequent cutting of trackage is in progress on many of the systems.

Donald Sims

The Pacific Electric Railway, serving Los Angeles and its environs, is the fourth largest trolley and interurban line in the United States, outranked only by Chicago, New York City and Philly. LA-bound streetcar discharges some passengers at the Masonic Temple in Glendale, one of 125 PE communities

UNITED STATES

Alabama
Birmingham Transit Co., 100
California
Key System Transit Lines, Oakland, 103
Los Angeles Transit Lines, 240
Municipal Railways of San Francisco, 183
Pacific Electric Ry., Los Angeles, 550
Sacramento Northern Ry., (F), 100
Connecticut
Seaview Avenue Industrial, Bridgeport, (F), 6
District of Columbia
Capital Transit Co., 120

Illinois
Chicago, Aurora & Elgin, Wheaton, 100
Chicago, North Shore & Milwaukee, Highwood, 240
Chicago Transit Authority, 900
(surface, 500; El and subway, 400)
Illinois Terminal RR, Springfield, 490
Indiana
Chicago, South Shore & South Bend, Michigan City, 163
Cook Transportation Co., Evansville, (F), 2
Indianapolis Rys., 25
Twin Branch RR, Mishawaka, (F), 3
Michigan
City of Detroit, 150
Minnesota
Filtration Plant Ry., Colombia Heights, (F), 2
Minneapolis, Anoka & Cuyuna Range RR Fridley, (F), 3
Twin City Rapid Transit, Minneapolis, 400.
Missouri
Kansas City Public Service, 115
St. Louis Public Service, 175
St. Louis Water Works Ry., 8
Nebraska
Omaha, Lincoln & Beatrice, Lincoln, (F), 10

Steve Maguire

Montana, where the Anaconda Copper Mining Company is king, has reached the end of the trolley line with the abandonment of the company-owned Anaconda Street Railway. In this instance the scene is the underpass at—you guessed it—Anaconda, Mont.

Iowa
Cedar Rapids & Iowa City, Cedar Rapids, 44
Charles City Western, 25
Ft. Dodge, Des Moines & Southern, Boone, 185
Southern Iowa Ry., Centerville, (F), 19
Waterloo, Cedar Falls & Northern, Waterloo, 128
Kansas
Hutchinson & Northern, Hutchinson, (F), 8
Kansas City, Kaw Valley RR, Bonner Springs, (F), 20
Kansas & Missouri Ry. & Terminal, Kansas City, (F), 11
Louisiana
New Orleans Public Service, 30
Maryland
Baltimore Transit Co., 200
Potomac Edison Co., Frederick, 24
Massachusetts
Metropolitan Transit Authority, Boston, 258
(surface, 200; El and subway, 58)
New Hampshire
Claremont Railway, (F), 6
New Jersey
Atlantic City Transportation Co., 15
Hudson & Manhattan RR, Jersey City, 20
Public Service Coordinated Transport, Newark, 20
New York
New York City Transit System, 775 (surface, 75; El and subway, 700)
Niagara Junction Ry., Niagara Falls, (F), 30
Queensboro Bridge Ry., New York, 2
Rochester Transit Corp., 33
Staten Island Rapid Transit, 97
Third Avenue Transit System, Yonkers, 50
North Carolina
Piedmont & Northern Ry., Gastonia, (F), 29
North Dakota
Valley City Street & Interurban Ry., (F), 2
Ohio
Cleveland Transit System, 150

Steve Maguire

All that remain of New York's once far-flung Third Avenue Transit System are five trolley lines confined to Yonkers. *Above*—Getty Square, business center of the state's fifth largest city. In Canada, most electric lines are based in the Province of Ontario, where one of eight is the Canadian Pacific's Lake Erie & Northern, *below*, operating between Galt and Port Dover. This is Simcoe, 7½ miles from the Port

William D. Middleton

Steve Maguire

There are 11 transit lines in Pennsylvania, more than in any other state or province of North America. But the Lehigh Valley Transit, for one, isn't as big as before, having wiped out its Norristown-Lansdale route last fall

Marion Reserve Power Co., Reese, (F), 10
Ohio Midland Light & Power, Obetz Jct., (F), 13
Shaker Heights Rapid Transit, 26
Toledo & Eastern, Toledo (F), 11
Youngstown & Southern, Youngstown (F), 25

Oklahoma
Sand Springs Ry., 32
Tulsa-Sapulpa Union Ry., Sapulpa, (F), 15

Oregon
Portland Traction Co., 40

Pennsylvania
Altoona & Logan Valley, Altoona, 15
Johnstown Traction Co., 35
Lackawanna & Wyoming Valley, Scranton, 42
Lehigh Valley Transit, Allentown, 70
Philadelphia Suburban Transportation Co., Llanerch, 51
Philadelphia Transportation Co., 600 (surface, 540; El and subway, 60)
Philadelphia & Western Ry., Upper Darby, 37
Pittsburgh Rys., 500
Reading Street Ry., 10 (A)
Scranton Transit Co., 25
West Penn Railways, Connellsville, 100 (A)

Rhode Island
Warwick Ry., (F), 2

Texas
Dallas Ry. & Terminal Co., 85
El Paso City Lines, 16

Utah
Bamberger RR Salt Lake City, 64
Salt Lake, Garfield & Western, Salt Lake City, 21

Vermont
Springfield Terminal Ry., (F), 9

Washington
Yakima Valley Transportation Co., Yakima, (F), 20

Wisconsin
City of East Troy, (F), 1
Milwaukee Electric Ry. & Transport Co., 80

CANADA

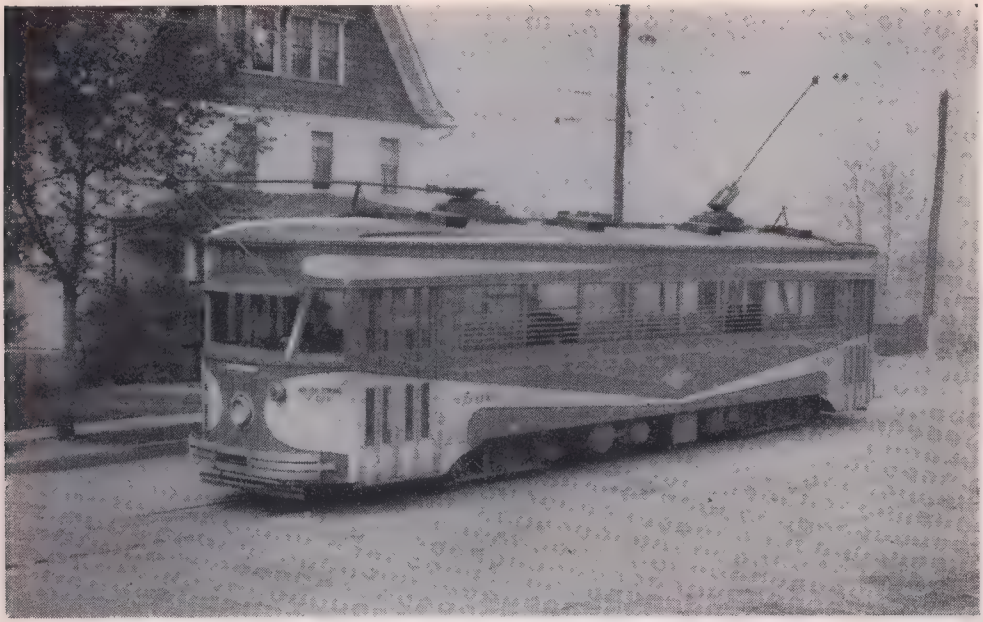
British Columbia
British Columbia Electric, Vancouver, 75

Manitoba
Winnipeg Electric Co., 40

Ontario
Cornwall Street Ry. Light & Power, (F), 10
Grand River Ry., Preston, 18
Lake Erie & Northern, Preston, 51
London & Port Stanley, London, 47
Niagara, St. Catharines & Toronto, St. Cath., 70
Oshawa Railway, (F), 22
Ottawa Transportation Commission, 45
Toronto Transportation Commission, 200

Quebec
Canadian National Rys., 32
Montreal & Southern Counties Ry., St. Lambert, 40
Montreal Transportation Commission, 278

THE ACUTE SHORTAGE of skilled railroad workers throughout the Soviet Union is especially serious on the railroads in Siberia and Central Asia, including the Turkestan-Siberian Railway. In order to meet the difficulties of the situation a decree has just been issued jointly by the Commissariats for Labor and for Transportation calling upon the industries and organizations where ex-railroad employes are engaged to relieve for transport work immediately all former skilled workers, such as locomotive engineers, firemen, machinists, station masters, traffic managers, etc. The former railroad workers will be paid two weeks wages at the time of transfer. Such workers are required to register with the local Labor Office, which should assign them within five days for work on the railroads at their specialty.—Economic Review of the Soviet Union, February 15, 1931



Another Pennsylvania dwindler is the Lackawanna & Wyoming Valley in Scranton, soon to go, too. Our *Electric Lines* expert spotted the Scranton Transit Company's Brill master unit at Dunmore a decade back. The state's 1485 miles of surface, subway and El lines are fading rapidly

I was the square at the square dance!

I CAN'T GET A GAL UNLESS I ROPE ONE!

SMARTEN UP, SON! GALS WOULD STAMPEDE YOU IF YOU'D GET GOOD-LOOKING WORK PANTS AND SHIRTS MADE OF PEPPERELL FABRICS!

AT THE NEXT DANCE

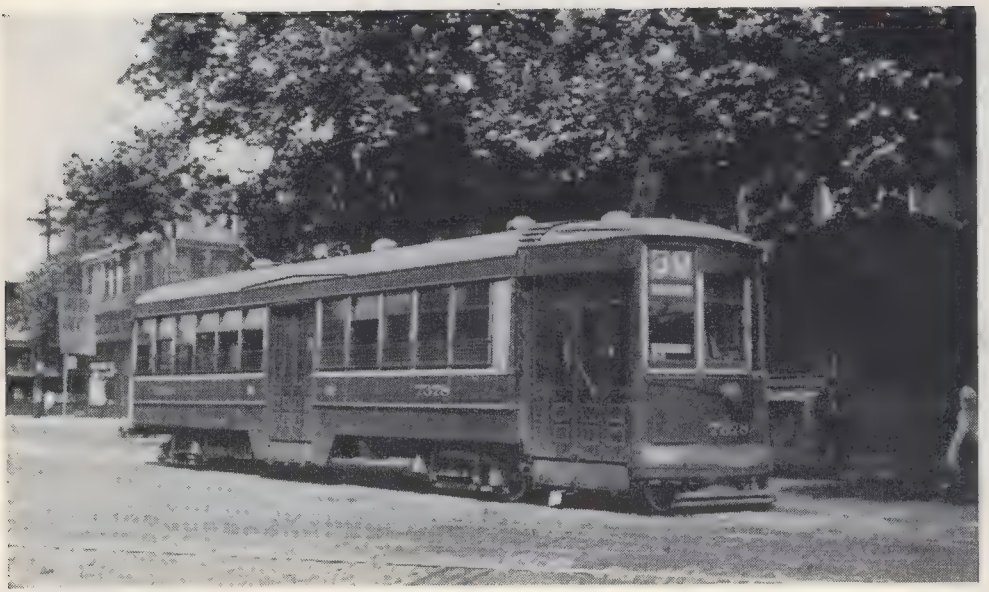
CHANGE PARTNERS? NOT ME. I COULD DANCE WITH YOU — FOR LIFE!

AM I GLAD I GOT ME THESE NEAT DUDS OF PEPPERELL FABRIC!

PEPPERELL FABRICS®

When you buy work clothes, look for this fabrics label.

Pepperell Manufacturing Company, Boston, Massachusetts



Steve Maguire

Reader Richard Lane Jr. says we've neglected the Philadelphia Transportation Co., one of the Big Four among U.S. trolley, subway and El operators. *Above:* an old Peter Witt car on Parkside Avenue, Route 39. *Right:* a green-and-cream double-ender at the Rhawn Street switch, Route 59 in pre-trackless trolley days *Leslie R. Ross*

Electric Lines:

Carbarn Comment

APPARENTLY we have been overlooking the Philadelphia Transportation Company's trolley, subway and elevated system, as a few fans have asked us to devote more space to the PTC, one of the largest railway lines in the nation.

Richard Lane Jr., Haverford College, Haverford, Pa., writes, "I feel that we should not take these lines for granted in these times when the fate of so many railway lines appears to be in jeopardy.

"Presently there are 48 streetcar lines operating in the City of Philadelphia, together with 50 bus routes, 5 trackless trolley lines and 4 high-speed rapid transit subway-elevated lines. The PTC maintains a fleet of 1800 trolleys, of which 1500 are in daily use in the city. The Market Street subway line is being extended to 46th Street, replacing a portion of the elevated line that now serves the area. Also included is the extension of the subway-surface trolley tube under Woodland Avenue into southwest Philadelphia. Another project is the long-awaited completion of the Locust Street tube. The tunnel was built in 1933 but never completed because of lack of funds. Present plans call for this line to be in operation shortly. It will be an extension of the Delaware River Bridge high-speed line which now terminates at 8th & Market in Philadelphia. Since cars will be able to operate as far west as 18th and Locust, it will relieve some of the congestion in the downtown part of the city, as Public Service buses operating from Camden into downtown Philadelphia eventually may be cut back to the end of the rapid transit line in Camden, making connection with the bridge line."

QUEBEC'S interurban line to St. Anne de Beaupre, a 26-mile route giving passenger and freight service, has been sold by the Quebec Railway Light & Power to the Canadian National Railways. This route was regularly used by the CNR as a connection with its Murray Bay Division, and for a long time the CNR has been considering its purchase to consolidate its system.

Jean LeClerc of Limoilou, Quebec, says that the line will be double-tracked with heavier rail; the St. Paul Street terminal may be relocated, and Dieselization of service, with possible termination of passenger service, might be contemplated. LeClerc points out that any attempt to end passenger service would be most ill-advised. In 1950 the interurban line carried 2,118,048 passengers and hauled over 17,000 freight cars originating on the road. For a 26-mile line, two million passengers in a year is something in itself.

FELIX Reifschneider of Orlando, Fla., tells us of some experiences he once had on the Lake Shore Electric.

"My first ride on the LSE was in October, 1926. They had a curious system at that time. There was a *limited* car every hour from Cleveland to Toledo, alternate cars going via Sandusky and via Norwalk to Detroit, but every other car requiring a change at Toledo to reach Detroit.

"The cars really kept on time in those days. Starting in 1923, the DMT cars stopped at a transfer station on the south end of Detroit where riders transferred to little Dodge 21-passenger buses for the trip downtown. This was supposed to save time as it was a 45-minute run for the interurbans up Fort Street to the terminal in downtown Detroit. However, it took two buses to carry the load on one interurban car, and then the buses were badly crowded. With the time lost making the change from the interurban to the buses,

Steve Maguire

Felix Reifschneider remembers the Lake Shore Electric's No. 182. Bought second-hand from the Michigan Electric Railway, the car was the last interurban type in LSE service

the actual saving was only about ten minutes. As a result it was only a short time later that the cars went downtown again.

"The big, steel cars on the LSE were fairly comfortable because of their weight and good track, but there was some defect in the design of the truck, whereby it was subject to *nosing* at high speed to an unusual degree. I heard some mechanical experts at the AERA convention of 1926 (which was being held in Cleveland and was the reason I went to the city) discussing the difficulty that the line was having with the trucks.

"In 1930 there were about four *flyers* a day on the schedule, making the Cleveland-Detroit run in 3 hours and 45 minutes. Unfortunately, they just couldn't make the time and cars were late, regularly. In 1933, schedules had been cut by the depression to a *limited* every two hours. It was pathetic. Practically no one was riding them. The cars would leave Toledo with about 20 or 25 passengers, but by the time they were a mile out of the city limits, they were lucky to have 3 or 4 passengers left. Through traffic had disappeared and there were almost no passengers on the car into Lorain.

"The cutoff in Sandusky was a joke. It was supposed to have been built because city authorities objected to having freight trains operating in the streets. But it wasn't much help to the passenger cars, and in the end they ran into Sandusky from the cutoff and then had to change ends and back out again to resume the through trip. In this way the cutoff managed to lose more time than it saved.

"The last time I rode the LSE, in the fall of 1937, its schedules had become a joke. Cars were always 20 to 60 minutes late. The curves were in such bad shape that the motormen were afraid to take them at high speed, and the power was weak, probably from rusted rail bonds.

"At Vermilion the state was building a concrete highway bridge across the LSE and the New York Central tracks. To speed construction of the bridge and make it safer for the workmen, they had sectionalized the trolley wire for about 500 feet. At the Cleveland end there was a circuit breaker, but there was a shunt wire around it with a knife switch in a box on a pole. The wire through this section normally was dead. When a car approached, one of the workmen would throw the knife switch, thus energizing the wire from the Toledo end only. The car went through all right and after it passed, the workman pulled the switch again, leaving that wire dead and allowing work to proceed on the construction. Unfortunately, as soon as the car passed the breaker on the Cleveland end, power could

only be drawn from this end and the car was so far from a substation that it could proceed at a top speed of only 15 miles an hour for the next 2 or 3 miles. The motorman put his controller on the last notch, but this pretty nearly killed the power altogether, so he had to put it back into series running position because he could make more time that way.

"Reaching the new construction, we were 15 minutes late, and we lost another 15 minutes before we got going again beyond the dead section of wire. It was a shame. You could almost feel that the end was in sight."

* * *

SAN FRANCISCO has finally purchased the California Street Cable Railroad but the cars are still not operating. In August, 1951, the lines ceased operating because the liability insurance policy on the road was cancelled by Lloyd's of London. In the intervening time, the City of San Francisco closed the deal to purchase the lines for $138,032. Just when they will see service again is problematical. Some say that the city will try to abandon the lines, giving as the reason the excuse that it cannot obtain new cable for operation. We have learned from experience not to foresee or believe anything coming out of the municipally-owned transit system of San Francisco, until it happens. Fortunately, we can report that 25 new PCC cars are being delivered for use on the few remaining surface lines.

* * *

AMONG the non-revenue equipment for the Orient Heights rapid transit extension out of Boston, reports Forest L. Horton of 40 Main Street, Haverhill, Mass., is a car built in 1950 for the new line by Henry E. Dow Company of

Horsecars still run down Mexico way, in Celaya, which is on the Mexico City-El Paso highway. When the 100-year-old car reaches the terminal in the center of Celaya, the horse is unhitched and led around to the other end for the return trip, announced by the operator blowing an odd little brass horn

John W. Marchildon

Steve Maguire

Cincinnati Street Railway cars used the Mt. Adams Incline until 1947, when it was discontinued. Here the open cars are being carried up the incline in 1910

Trenton, N. J. No. 3283 is square-ended, wooden, with double trucks and could have been built anytime in the early 1900s.

Although the rapid transit cars have pantographs, No. 3283 carries trolley poles. Here are some specifications, from Horton, of new MTA cars on the local and rapid transit lines in Boston:

MTA RAPID TRANSIT LINES

Nos. 0548-0587, PCC, East Boston tunnel cars for the Orient Heights extension

Built by:	St. Louis Car Co.
Year built:	1951
Seats:	Longitudinal—46 passengers
Length over anticlimbers	48′ 6″
Width over eaves:	8′ 7″
Height (rail to pantograph in lowered position)	13′ 2 11/16″
Rail to top of floor:	3′ 5½″
Distance between kingpins:	31′ 4″
Operation:	One operator for train, plus one guard for each two cars
Motors:	Four WH 1432H
Size:	55 hp.
Control:	Westinghouse
Trucks:	Clark B-10
Wheel size:	28″ solid steel
Brakes:	Dynamic down to 9 mph, then air brakes by conventional brake shoes on wheels.

MTA SURFACE LINES

Nos. 3272-3322, picture window PCC For local Boston service in MU trains

Built by:	Pullman Standard
Year built:	1951
Seats:	42
Length over anticlimbers:	46′ 5″
Width overall:	8′ 8″
Height over monitor:	11′ 1″
Rail to top of floor:	2′ 8 11/16″
Distance between kingpins:	22′ 9″
Operation:	One-man
Motors:	Four GE 1224
Size:	55 hp.
Control:	GE MCM
Trucks:	Clark B-2
Wheel size:	25″
Wheelbase:	6′
Brakes:	Combination of air and extended dynamic and magnetic track brakes.
Remarks:	Picture window PCC cars with standee windows. Cannot MU with other PCC cars due to greater width.

William D. Middleton

No. 130, a 40-year-old Preston product, now belongs to a group of Buffalo, N. Y. railfans. In active days she was southbound from Thorold, crossing Michigan Central main line at Welland on the Niagara, St. Catharines & Toronto

Photo from Steve Maguire

When the Japanese want to go anywhere in the Kyoto-Osaka-Kobe area they invariably have to take to the interurbans, No. 35 in Osaka, for instance, or the fast electrics, intercity buses being practically nil along with private cars

Tales From

THE INDIAN NATION

THE FIRST and very brightest picture I present to you, is that of a small chap of about five years standing under the watchful eye of his father, on the ETV&G depot platform at Clinton, Tenn., as they waited to board the accommodation. A coal drag with a low-wheeled, deckless *Consolidation* on the head end clanked into the siding, ready to follow the varnish out of town. The engineer, young, with clean overalls, gloves, red kerchief at his throat and all ready for the hard trip ahead, was leaning on the arm rest, alert yet relaxed, and as his roving

From that very hour I was determined to become a locomotive engineer

eye met my worshipful gaze, he gave me a real hand wave as one rail to another, and reaching up to the whistle cord gave with a little "toot-toot" just for me. This brought the ebony face of the fireman to the gangway, and he, sizing up everything, took off his cap and with a wide gleaming grin, said to me, "Howdy, Suh, Cap'n Howdy!" Of course I was speechless but I waved and danced.

That decided my future. From that very hour I was determined to become a locomotive engineer, and from that ambition I did not waver, in spite of parental objections, physical handicaps, (I was always both small and too young looking) or lack of opportunity.

I see again that same lad at the age of ten, on a long journey from Knoxville to Lexington over the famous Rat-hole Division, thence to his mother's home in West Virginia. After a sad interlude for us, as my grandfather was laid to rest under his loved oak trees, mother took up her journey to the Choctaw Nation, where father had secured an appointment as missionary-teacher, and had preceded us. What a thrilling, wonderful trip that was to me, already a rail fan; Cincinnati on the C&O; St. Louis on the B&O-SW; Monnet, Mo., on the Frisco, where we stopped overnight at a lovely home of the widow of a conductor. Her house was on a hillside overlooking the busy railroad yard. On again southward the next morning through the western edge of the Ozarks, past Fort Smith and off at Talihina, Indian Territory. I'll never forget the big basket packed by grandma; the tin cups of hot coffee at stations; the cars with open platforms; the clanking link-and-pin couplings; that wonderful Union Station at St. Louis; the beautiful miniature locomotive mounted in the lobby there; the view of the so-busy railroad yard as seen from that lady's home in Monnet where we spent the night. I could scarcely get away from her window to eat my supper. Then the little 4-wheel yard *goats* with sloping tanks, darting here and there, with their two huge headlights.

Now again on our way, past Seligman Junction with the very smart little train there to meet all connections. I don't remember any outstanding facts about Fort Smith, but at Bengal we got a helper on the head end over Winding Stair Mountain. This engine stayed on till we got to Talihina, at the foot of the mountain on the other side. Talihina was a village of about 300 souls, and was a sort of railroad local division point, with a seven- or eight-stall roundhouse, a water tank, turntable, coal chute and clinker pit. The helper engines, local freight and local passenger engines were housed there, and great was my disgust to learn that there was no room for a ten to thirteen year-old callboy. I lost no time in making myself solid with the railroad families, and all the stories I have of incidents of the late eighties and early nineties were garnered by me around the winter firesides and summer front porches of the homes of these engineers, firemen, trainmen and operators who made their living on the district which saddled the Winding Stair Mountain.

There was one young freight conductor who always had something to tell about the trip just ended, and whose aged father was fond of hunting squirrels. The old man, about 80, was very agile and keen sighted, and a good shot with an old muzzle-loading rifle, but he was very deaf. He had a good little squirrel dog and always brought home plenty of game. They were all glad for me to go with the old man (no gun for me, of course) so that I might call for help if anything happened. My folks were glad also to add squirrel stew to the menu.

The overtones of all those pioneer days was tragedy. It was ever-present, brooding, quick to strike and hard to forget. Tragedy to the man, white or redskin, who dared to intrude among the hills and gorges of that primitive vastness. Tragedy to the animal kingdom, both domestic and wild, because of that intrusion, and, last but not least, the tragedy of the ruthless waste of the wonderful stand of longleaf yellow pine timber. A sale of the accessible timber resulted in a regular "Gold Rush" to get out the logs and in a space

of less than five years the cream of the crop was felled, sawed and shipped. But, in this hurry, with portable saw rigs almost as thick in the woods as threshers on a Kansas prairie, and six-yoke ox teams taking the place of the modern skidders, the waste and destruction of smaller trees was only exceeded by the complete slaughter of saplings and seedlings. Many, many of the largest trees were split and broken in felling, and utterly wasted. No thought of conservation was evident. The bullwhackers mostly owned their own oxen and were a law unto themselves. The ox teams were controlled by words, backed up by a large whip with a four-foot hickory stock, to which was swiveled a braided leather lash eight or ten feet in length. This whip was two or three inches thick near the stock, tapering to a buckskin cracker, and in experienced hands was a formidable weapon against man or beast. Sometimes a driver, (doubtless under the influence) would chain a yoke of his oxen to a small tree and stand off and take them to pieces with that whip, because of some infraction, until they sank to the ground in submission. Woe to the man who dared to interfere—the animals were his property. And he would back this argument with knife or gun. With the timber gone, these drivers sold their oxen to the settlers and they were turned loose to forage in the woods.

AFTER the loggers and sawmills were gone, the forest fires took up the devastation of the Choctaw hills and the puny efforts of a few settlers and some of the Indians were of little avail. Many settlers and Indians and their families were burned out. The wild meat was driven far back into the hills and the predatory carnivores became an increasing menace to domestic animals.

All livestock had free range under the early Western code and crops and gardens were all fenced. The railroads exacted a heavy toll of tame stock. It is strange but true that a cow brute would much rather wander up and down the rails than feed on good wild pasture. Often have I, as a boy, been awakened by the howling of a pack of timber wolves who were chasing a crippled animal after it was struck by a train.

The tale was told of a southbound freight on the mountain surprising some calves at a spring in a small cove above the rail. The declivity on the other side was steep and deep. The engineer, afraid of a derailment if an animal should roll under the train, stopped as suddenly as he could. With only a few airbrakes on the head end, he whistled for hand brakes, and the tail-end crew, always alert on that hill, began to decorate. The jolt from the head end popped out a coupling pin and the rear end stopped first. At the same time, the fireman jerked open the firedoor to cool the fire, and the glow thereform lit up the top of the first boxcar, on which was a big, snarling cougar. This mountain lion and his mate had evidently been stalking the calves from a ledge on the cliff and both had jumped to the boxcar. The glow of the fire had stopped an invasion of the engine cab. The fireman grabbed a couple of fire rakes, jammed them in the fire and they were soon red hot. He armed himself and the brakeman and they, shoving the red hot pokers into the very mouth and paws of the big male cat, forced him to leap, yowling, off the car into space over the precipitous cliff. The female cat turned and ran back over the tops till she came suddenly on the gap in the train. As she jumped to the ground she was caught by the rear cars, which the conductor and flagman were letting roll to a coupling. So the net result was, two cougars and three yearlings killed, one break-in-two, but no casualties and not a great deal of delay.

Yes, somebody found the coupling pin; that was a daily chore of the gandy dancers —gathering and storing links and pins for the local to pick up and take to town. Often a flagman (they always carried lots of fusees) was forced to go back to the operator's shack at the summit, to escape wolves or cougars, there to stay until picked up by a following train or helper engine. Bears were plentiful but not such a menace.

One bear was the source of much amusement to all of us, except one engineer who really belonged north of Fort Smith. This bear was tame, almost full grown, and had been taken home by a hunter (who had killed the mother bear) and raised from a small cub, at a sort of hotel or boarding-house close to the depot and water tank at Tuskahoma, the Choctaw capital. The local freight crews invariably ate their noon lunches there and the bear, from cub-hood, ate with them, becoming very adept at standing erect and catching morsels in his big red mouth, his fore-paws waving.

This engineer was called for an Extra South from Fort Smith, being the only man then available. Knowing absolutely nothing of the tame bear at Tuskahoma, he stopped for water there. While the fireman filled the tank, the engineer dropped to the ground, off-side from the hotel, to oil around. When finished on that side, he started to cross the track in front of the engine. There he came face to face with Bruin, on hind feet, fore-paws waving, mouth wide open, truly a ferocious sight. With a yell the man threw the oil feeder at the bear and sprang up over the cow-catcher (no pilot in those days) over the running-board, into the cab, and with one motion, kicked the lever into the front corner, jerked open the throttle and gave two blasts of the whistle. He was leaving town. The fireman let go the valve rope and spout, and he and the front brakeman, who had grabbed a side ladder, scrambled down into the cab. "What's going on here, I didn't get more'n half a tank of water? What's the matter with you?"

"Never mind the water, man," the engineer said, "if you had seen that varmint of a bear, mouth open and paws a-reachin', you wouldn't even have thought about the engine. You'd been half-way to Antlers now, afoot. That feed can was all that gave me time to make it into the cab."

Well, they told him about the cub, but the story of his panic got around and after that he stayed north of Fort Smith.

The human tragedy originated mainly from the primitive way of living, that is from malnutrition and ignorance. It was a dry territory. Because of the Indian, the Federal Government outlawed liquor, but bootleggers and moonshiners were active. Many evenings before dusk have I heard a six-shooter emptied, which was a signal to rally round the keg or jug in the woods. There were few schools and very little money. Wages were low and the kids had to work, even from just beyond babyhood. The little toddlers learned to pick cotton for their mother long before they could even drag a little cotton sack of their own. Rural newspapers were scarce, though we had one in our town most of the time—a four-page weekly.

One bright spot was the scarcity of traffic accidents, or crossing crashes. People invariably gave half of the road to persons they met, and all of a railroad crossing to the trains. Everybody and his steed had a very wholesome respect for the iron horse, and those little kettles had good whistles. But once in a while a blow would fall and some old father and mother would sit in sad silence and wonder what had happened—no news for so long. Such a couple, in the western hills of Arkansas, wondered about their last son, who on his 21st birthday had insisted on visiting his married sister in South Texas.

After getting what information he could, this lad put on his best homespun suit and started on his first adventure. He walked fully 60 miles over the mountain tops to Bengal, I.T., where he bought a ticket for Paris, Texas, and boarded a train, the first train he had ever seen. After about an hour's ride at, to him, an incredible speed, the engine whistled loud and long and the boy asked a tipsy fellow passenger, "Is this Paris, Texas?" The fellow said "Yes", and the boy picked up his bandana in which all his worldly goods were tied, and went out on the open car platform. The tipsy passenger told the newsboy about the hayseed who was going to get off so soon for Paris, Texas. The newsboy rushed out to the platform, but no one was there. Thoroughly scared, he said nothing—the train was just now

The engineer and fireman knelt to ask God's protection for the lives entrusted to their care

slowing for the station stop at Talihina. Later that morning a man came to ask my father to come to the railroad yard where we found a young man's body badly mangled alongside the main line. Dad sent for the editor, and together they listed all the lad's meager possessions and agreed on all identifying marks possible. An account of this event was published, and all papers within a 200-mile radius were asked to copy. The railroad people supplied the story of what had happened on the train, but the guilty passenger had disappeared. About a month later, a covered wagon stopped at our house. The facts supplied by his father rounded out this story. I tell you my dad and the editor were glad their efforts were successful, and that thanks to help from others they had been able to inter the body decently in the local cemetery. You see, there was no peace officer or coroner in that whole region, only a few U.S. Marshals.

THE CHOCTAWS, however, had a unique but workable government for their own people. A tribal government with sheriff and judge for each tribal division or county, but no jail. There were only two kinds of punishment, a whipping post or a firing squad. The Choctaw was a man of his word. If it was necessary to delay execution of the sentence of death,

(as in the case of one man I knew, who wanted to gather his crop and provide relief for his sick squaw and papoose) the sentenced man gave his word that he would return on the day appointed, and he did. White men could hardly believe it. This man was executed on time. Whipping sentences were carried out immediately.

Many old Indians have sat and smoked their clay or stone pipes at my father's fireside while I listened, entranced, to their tales.

But mine was no idle life. It now seems incredible that I found any time for recreation, but I did. I rode all over the trails around our town, visited the old swimming hole, played ball, marbles, etc., until I finally got a job at the planing mill. That really stopped my roving. I was so small for my 14 years that it took some talking to get on there; in fact I had to tell the man that I'd work a week free to prove that I could do the work. That cinched the job and I was a regular from then on, til my dad moved to another assignment. My pay was 50 cents per ten-hour day, payable in merchandise. Men's pay was $1.10 per day. Abetted by my garden, and mother's canning activities, that $3.00 per week just about kept our table going. Fuel cost nothing but elbow grease. The woods were at our door, and I would drag wood in with our pony. I had early learned the business end of an axe and a bucksaw.

In summer when the surface wells went dry, I hauled water from the roundhouse well after work. I had a large barrel anchored on a sled and used the pony. Of course we didn't use a barrel of water a day. Ice was only a winter product. There was no drugstore or soda fountain.

I must not forget the praying engineer. This was a fine old gentleman in passenger service through our town. On Christmas Eve he bought some presents, including two large firecrackers, for his family at Fort Smith, and put the purchases in his seat-box, carefully placing the two firecrackers in a corner. After oiling his engine, he and his fireman knelt in the engine cab while he, as was his custom, asked God's protection for the lives entrusted to his care, and for themselves on the homeward trip. After leaving town, when the old man finished his smoke he knocked the ashes from his pipe on his hand, and opening his seat-box slightly, dropped the pipe inside. However, there was fire yet in the pipe, which somehow ignited the firecrackers he was taking home and they exploded, one after the other. The rule in those days about torpedoes was that one explosion was a caution signal, and two explosions meant stop. So at the noise of the two explosions of the crackers, the old man stopped as quickly as possible.

By this time the engine had rounded a curved approach to the bridge over one of those mountain streams which just then was a torrent, probably caused by a cloudburst in the hills. There was no bridge! It had been washed away and the ragged ends of track on each bank stretched futilely out over raging water. The old man felt very thankful to the good man who had, as he thought, put down the warning torpedoes. But as the people crowded forward, the fireman went back to tend his fire and saw wisps of smoke coming out of the engineer's seat-box. The supposed torpedoes were the firecrackers, set off by the sparks from the engineer's pipe. When this was known, the people were awe-stricken and such a prayer of thanksgiving as was rendered up by the engineer was not forgotten ever by those present. Such incidents furnished topics for many impassioned backwoods sermons.

The government was still paying the Indians for their land in the South, from which they were moved to the nation, and installments to each living Indian or ex-slave were made quarterly at central points. Talihina was one of these points. Before these paydays, the stores were stocked with gaudy goods and everything dear to the Indians' heart.

Well, we had finally acquired an undertaker, and he had ordered a hearse of sorts. Because it arrived just before one of these Indian paydays, delivery was postponed

by the dealer. In the meantime, one more Indian wanted a spring wagon than was available. Pushing his way into the warehouse, the redskin spied the hearse. He would not be denied, and paying an exorbitant price, he hitched his ponies to it and loaded his squaw and four papooses into the glass-sided compartment usually reserved for the coffin. Then he climbed on the high seat of his shiny, new black wagon, popped his whip and drove all over town before heading (without calico or crackers) home. I, myself, saw this.

Then there was the time at the grist mill where I was the meal dipper on Saturdays, when I got the nod from the miller to start up the engine after the noon hour—my face is red now, when I recall that day. I was 12 years old. The boiler was a locomotive type, portable but with no traction, with the single cylinder engine on top. There was a globe valve throttle which spun easily. I grasped the hand wheel of said trottle, and spun. The engine raced, the belt flew off, the boiler quivered on its foundations, and I was thenceforth demoted from engine starting. Nobody had troubled to tell me anything—I had to learn the hard way.

TIME ROLLED ON. The planing mill caught up with orders and shut down for repairs, and about that time father got a new assignment. Gone were his long horseback trips into the hinterland. He would now be able to reach all his appointments by rail, and preach to white people. And we would have to move to another town. Daddy sold our horse to the young local doctor, who, knowing the affection I had for the animal, pretended to need a stable boy until he could sell some three or four horses he had taken as payment for his services. But his main argument was that Billy, my pet, would need exercise daily. Well, you know I fell for that, and while daddy was arranging a new home and getting ready to move, Billy and I covered again all the old trails and found some new ones. Finally we said goodbye to the sunny side of Winding Stair Mountain and Talihina.

We moved to Wister, Indian Territory, some 40 miles north, but still in the same district of the Frisco. But Wister was also the Eastern Terminus of the CO&G. The towns west of us on that road were Daddy's new field. To my joy, I found that the Choctaw passenger train lay over there from 4 p.m. until 1 p.m. next day. This is now the Rock Island and extends east to Little Rock and Memphis. I soon got acquainted with the layover engine crews and would ride the wye and do any chores I could at the lay-over track.

There were three crews on this run from Shawnee to Wister. Each crew had a regular engine, all of different makes; a Rhode Island, a Rogers and a McQueen (I think). I well remember the outstanding differences, however. The Rogers had a limited cut-off; the Rhode Island had a fine-toothed reverse lever latch, while the third engine had a big latch with notches in the quadrant on both sides of the slot. This engine had also a peculiar throttle latch. There was a notched wheel on the lever that was geared into the quadrant and the latch locked (or was supposed to lock) this wheel or roller. It was about three inches in diameter and was definitely not a good arrangement. These engines were all *American* type.

The company built a small one-room frame house for the engineers, one for the firemen and another for the porters. One engineer never used the shanty, but got off at the depot and stayed at the hotel. He was quite a sport and loved to hunt. Game was plentiful, so in the early morning hours he was usually in the woods and often had a turkey to put in the baggage car. The fireman took care of the engine. He and the porter would turn the train (two coaches and a blind baggage car). I was always welcome, and this fireman taught me how to shovel left handed, how to place the coal and how to put water in the boiler; but he did not tell me anything about air and I did not notice that lack. So I had my first wreck, or rather *we* did. Before coupling up and backing down to the depot about noon, we ran the engine up the main line to the iron bridge, and

there gave the boiler a good blowing. This would also clean out the front end through the cinder hopper. Then we would stop and fill up at the water tank and enter the side track to couple up, pull out and back down the main to the depot.

Well, on this day we did not stop at the water tank, for the air pump had stopped and we had no air. The porter, at the switch, saw that we had failed to stop, so he let us down the main where there was room, and the fireman used the reverse to stop. Back we went to the water tank, after Homer tinkered with the pump; but while he filled the tank it stopped again. He was getting late so he cussed a little and snatched the throttle pretty wide for a start and this time the porter, of course, let us in on the cars. But he couldn't get on as we went by, and again Homer couldn't stop. Well, he wrestled with the reverse but this was the one with the blind quadrant—only one notch in the front corner. He didn't quite reach that notch so back came the lever, and fireman too, and boy we hit! I was braced and not hurt, but the wooden end sill on the tender was splintered, the blind baggage platform steps and coupler were demolished. We had to run around the cars, couple the sharp end into the rear car, shove out and run the wye, finally stopping at the depot with the engine on the head end alright, but backing up, and the cars in reverse.

I slipped out of the cab on the off side and strolled around to the platform as the engineer came strutting up with a big turkey, which he tried to put in the coach at the place where the baggage car door should be. Well Sir! Then fire and brimstone began to crackle, and the more he thought of having to back up, at least to McAlester, with coal blowing back in his face, and the explanations to be made, as well as possible discipline, the worse he cussed the fireman. In those days the engineer was the boss. I never learned what was the outcome, but I took a hint and did not ride the wye any more.

One day shortly after this incident, I was on the depot platform as a Frisco cattle train from the south made the safety stop for the railroad crossing. The engineer had a full train for his little pot, and stopped pretty well back so he could get a run for Cavanaugh hill just north of the station. Well, he whistled off and here he came. I noticed a young man, who kept out of sight till the engine got by, (we were on the fireman's side) come onto the platform and eyeing the fast coming caboose, hitch up his pants and take a practice step or two. He was far from sober, and must have concluded the cab would be too fast, so he grabbed a side ladder about four cars ahead. His foot missed the stirrup and he swung between the cars and, losing his grip, slid to the track. His feet landed between the rails and he was stretched out on his face, altogether inside the rails. The old style wooden brake beam on the next car clipped his head and there he lay, unconscious, till the train passed over him. He was right in front of me. My yells had brought the agent and the operator. They gave the conductor and flagman the high sign, and some men carried him into the barber shop, where the barber and the doctor shaved and dressed his scalp, then roused him from his drunken stupor. The engineer on that train was his dad. The boy had wanted to ride, but didn't want the old man to see him drunk. He got well but didn't quit the booze.

By this time my father began to dream of a professional career for me, and he built his air castles on the presumption that as he willed it, so it would be. My ambition, talent or preferences were not to be even discussed. There was no money, but he began to talk of a doctor's shingle for me. He told mother I would have to work my way through school. I didn't say anything, but I re-dedicated my future to the throttle. I could see as good a chance to work up to that, as to go through with the college program without enthusiasm. Well, poor dad, he never had the first "ten" to even take me to a school, and I was too small and young to get work in a railroad shop, and there were no shops near us anyhow. So I did odd jobs, and dreamed.

I DO KNOW my dad hated railroads with more than an ordinary dislike. He never took a ride on a train without an acute attack of train sickness, and a 60-mile round trip meant a day in bed when he got home. He had few friends on the smoky end, but with passenger train conductors and agents he did very well—the white collar complex again. When the agent at Wister, knowing of my aspirations, mildly suggested a railroad career for me, after dad had been talking big about me and a doctor's shingle, the old man hit the roof. He came home boiling, and the next thing we knew I was apprenticed to an old whiskey-soak of a backwoods editor who had just hit town with primitive equipment and proposed to get out a weekly paper. Of course he had put off the bad habits till he got started.

The apprenticeship and freedom from finances didn't bother me. If I had been paid, the money would have gone into the family budget, so it made me no never mind. I rather liked it, as that winter was cold and I had a warm indoor job. Did that old cuss work me? And how! The only stipulation Dad had made was that I would have time to keep the wood boxes full at home, and that was all I got.

Well, come spring, I found the print shop stripped bare one morning. The old coot had gotten in trouble and like the Arab had silently stolen away. But I found plenty to do. I planted a big garden and took on two others also. One was for a cattle man who moved his young family to town. His brother's family stayed on the ranch. They traded horses too, and I always had a horse to ride and to haul wood or plow the gardens. As I have said, there were no schools, but my mother kept me plugging, and about this time I got to the back of *Kellogs Grammar* and *Ray's Third Part Arithmetic.*

About the time the gardens were laid by, my cattle man, Ben Allen, made a deal for two or three carloads of those work oxen, which I have mentioned earlier as being turned loose in the woods when the logging boom was over. These critters had not turned out to be such a good investment for the settlers in the hinterland. They were wild and pugnacious. They could not be shut up or penned, for after years of hard labor, beating and abuse, they seemed determined to keep their new found freedom. The squatter, with his plow horse, could not corral and fatten them, so the Allen Brothers got them for very little money. To my joy I was offered the job of driving and guarding the camp wagon on this roundup.

Just a day or two before we started, I was riding along a woods road when I came upon a busy little camp. There, helping her parents in this wood-working camp was my first heart-throb. I had become acquainted with her the winter before. She was sweet and smart, a petite brunette and 15—I was 16 then—but her dad and mine were not even friendly, so I was not welcomed at her home, and while I was tied up in that newspaper office, my girl's family had moved away. No one knew where they had gone—he was that kind of uncommunicative person. Now, here was I sitting on my horse in talking distance of my sweetheart, but—so was her old man. My sugar was embarrassed to be found in old work clothes and barefoot (she really was nice) and further handicapped by the frowning displeasure of her dad, who was not civil enough to speak to me, but bawled her out for slowing up on her job. So I turned and rode slowly away. When I had returned from the trip into the mountains, I found they had moved again. Did I say back yonder that there was tragedy in those hills? Well, what do you think?

The Allen brothers, with their riders, the camp wagon and me, and an extra supply of lassoes and short lengths of rope with which to neck these cattle in pairs for easier handling, got off to an early start on a bright August morning. What a trip we had. It was planned to hold the herd in a 40-acre field near a store and Post Office on the Arkansas side of the line. The fence was strengthened and wings built at the gate. When we got there the Post Office was gone and the store was empty. The store keeper's dad lived across

the road and from him we learned there had been a gun battle, (bullet scars on the porch were plentiful) and the "revenoors" and marshals had hauled off a wagon-load of moonshiners, his son among 'em. Uncle Sam had taken the Post Office and the kinfolks had divided up the store.

This was bad for us, for we were to supplement our supplies from the store, and we ran short of grub. There was one case of stale crackers left in the store and a jug of molasses. One of the boys found a settler who could spare a side of meat, so we fried the meat, stirred molasses in the hot gravy and sopped it up with the stale crackers.

These steers we were after would fight and charge a horseman as quickly as they would a man on foot. If the man was unhorsed, he'd better climb a tree where he would stay until rescued. Even as they had been yoked together, so they grazed near each other; therefore two cowboys had to work together to rope and neck them up for the drive to the pen. Once they were tied in this fashion, they were easy to handle. Well, we got them to the railroad and shipped, and I was glad to get my feet under a loaded table again.

I will comment here as to just how the well-garbed cow poke of the nineties was turned out: A short-coupled, sure-footed pony, a standard stock saddle (except that he wanted a roll cantle on the back of the seat so he could grab a good hold when about to be unseated) and a big pair of saddle pockets; also a long braided whip coiled on one side of the saddle horn, rope on the other, a flat-crowned, wide-brimmed hat and, last but not least, a pair of handlebar moustaches.

Well, in the fall of 1897 my dad moved to the Northern part of the Cherokee Nation and I worked on an extensive hay ranch during most of our sojourn in that country. I was not far from Will Rogers then but didn't know it. There my father acquired a nice little team for his buggy and dodged the railroad "cyars" all he could. My dad was a hillbilly in spite of education and ambition. Born in the Blue Ridge country, this was his first sojourn on flat prairie and now it was getting too crowded. He put in for, and got, a transfer to the Western part of Oklahoma Territory, where he could file on free land and really be a pioneer again.

HE TOYED with the idea of an overland trip with a light covered wagon, but there were bandits, bank robbers and outlaws in the Creek and Osage country, in between, so he settled for a last railroad trip. But I was lucky again. One fine morning, I saddled one pony and, with a pack on the other, set out to take the ponies to our new home. To avoid the road agents, I rode up into and through the southern edge of Kansas. A never-to-be-forgotten ride of about 300 miles over new routes and through strange country. And among strange people, who stared at a lonely boy as though he were a criminal or a leper. No civil greeting, no smile, no favor, not even water for the ponies from private wells or tanks—just hostile stares. But I stopped each night in some small town and finally turned south again, facing a strong southerly wind, into the Oklahoma Territory.

There I found a real school and attended for the rest of the term, at a little county seat town on the Rock Island Railroad. Then I went to work for a local doctor.

My dad soon pressed on westward another 120 miles, but I got a temporary job as depot helper, when the agent's brother got a job as operator at Enid. I soon found out that my job would play out when this agent's younger brother finished high school up north. Well, I wanted a job in the mechanical department anyhow, so I promoted myself to all the freight crews I could reach. Fortunately, a work train, a ditcher, tied up at our town and I fixed it up to go in to the shop and get a job. The engineer was a good fellow, but checked on me with the agent, who was a good friend of my dad. The agent wrote to my dad, who in turn notified the officials of the road not to hire me, as I was a minor and he would not sign a release. So tumbled my house of cards.

About that time, a northbound passenger train on the Rock Island was wrecked. Getting a highball from the track walker, the train shot out on a high trestle, over the Cimarron river at flood, and train, trestle and all went down to destruction. Few people escaped. This was in 1899 or 1900. Regardless of the isolation of the region where my folks had settled, a full 60 miles from the nearest railroad, and not a single telephone in the entire county, a tear-stained letter from my mother found me, where I had gone to her cousin's wheat ranch. That seemed miraculous to me, and when I read further, of the effect of the news of the rail disaster on her ailing heart and her frantic appeal to her only son to give up such dangerous ideas and come to live at least near to her . . . Well that was my mother, so I went to the end of steel on the CO&G at Weatherford and thence north-westward to the Comanche Country, 60 miles by stagecoach.

We all thought mother had heart trouble and the threat kept us all alert for the worst. It was many years before we learned that nervous indigestion was her trouble. At any rate, she was not afraid of the dangers I faced in working cattle and bronchos, as long as I stayed away from locomotives. Well, I was convinced that I could not win until I reached my majority, so I settled down, (if you can call tearing over the prairies after half-wild steers on a wilder 'bronk' over prairie dog holes, arroyos, etc., for $30.00 a month and chuck, settling down). I'll take the rocking, rolling deck of a locomotive anytime, in preference to the hurricane deck of a western broncho.

So ended the saga of my boyhood, as it began, on a note of tragedy. Hopes were blasted; a wonderful opportunity was lost, for in losing my chance at a roundhouse job at El Reno, I missed out on the opening of the last free settlement of government land and the building and operation of more than 200 miles of new railway by the Rock Island in Southwest Oklahoma. But my mother and sisters were happy that I was near, so I took what came in my stride and kept my mouth shut, biding my time till I could work out my plans.

"Careful—that's genuine cowhide!"

G. I. RAILS

A CIVIL WAR general expressed an age-old military maxim very succintly: Success in battle, said he, belongs to him who "gits thar fustest with the mostest." A grand-nephew of the great Bonaparte, Louis Napoleon, emperor of France, was defeated in 1871 by the small but up-and-coming Prussian Army partly because the Prussians had the vision to grasp the advantages of using that wonderful new invention, the railroad, to move troops and supplies with the greatest possible speed and dispatch.

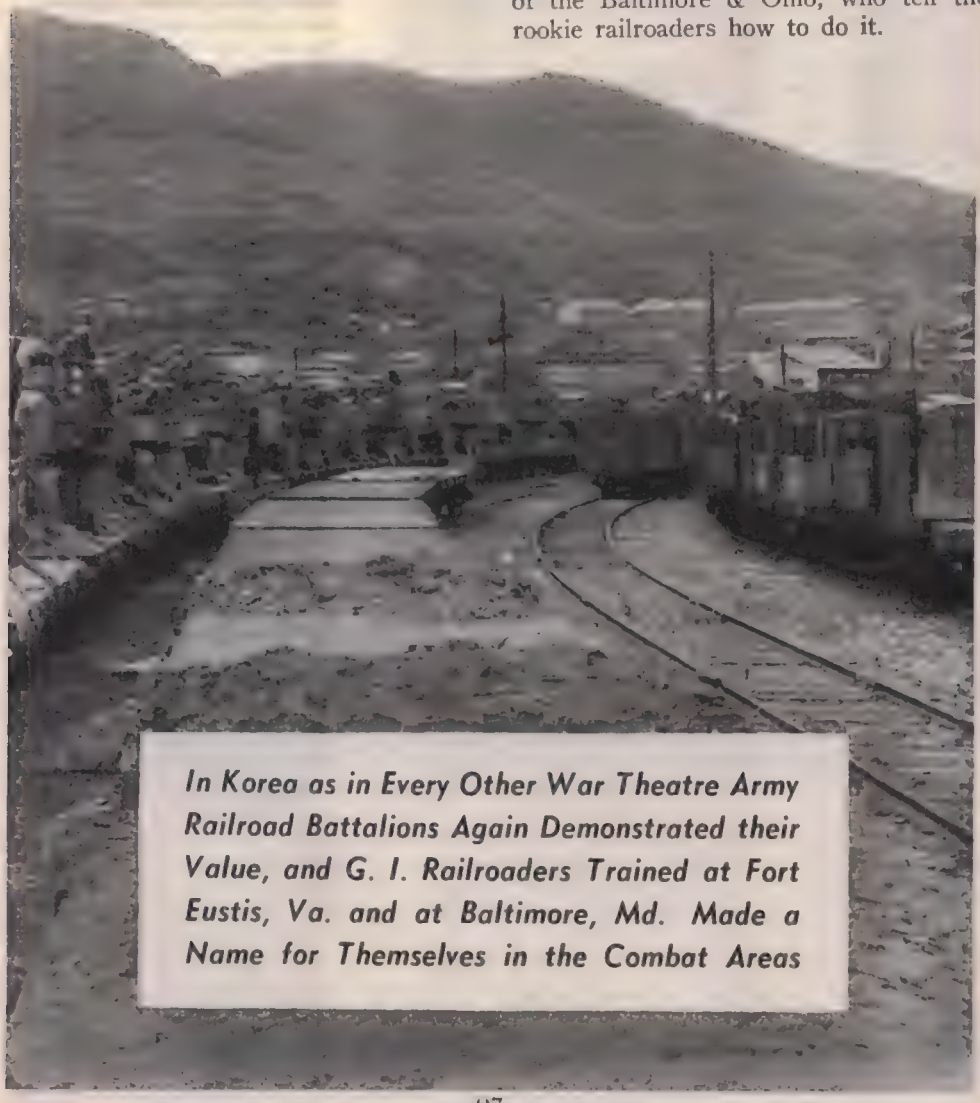
Since that time, the military value of railroads has itself become axiomatic. One has only to recall the tremendous effort which the U. S. and British air forces put into their round-the-clock pounding

of railroads and railroad marshalling yards in Germany and German-occupied countries during World War II. And for many months of 1950 and 1951, the U. S. Air Force directed the same kind of furious effort against Communist rail communications in Korea.

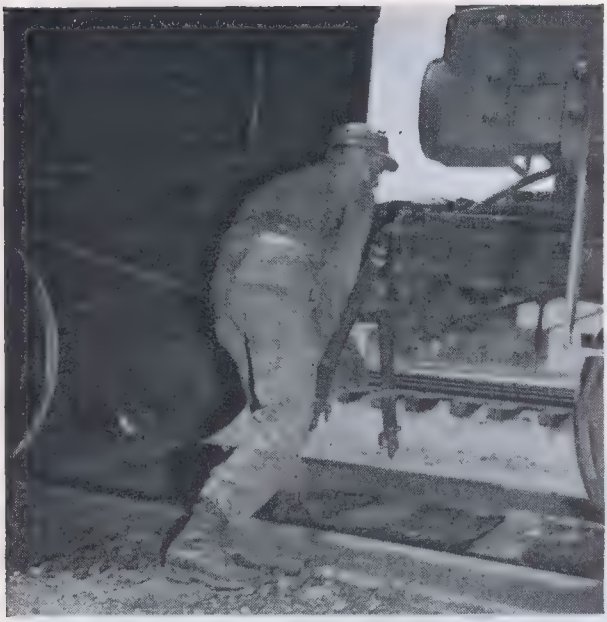
What isn't nearly so well-known is the fact that U. S. Army Transportation Corps Battalions played a big part in keeping our own front lines supported with reserves of men, and with supplies—food, clothing, medicines, ammunition.

Like every other type of military operation, military railroading requires men trained in advance to do the job. At Fort Eustis, Va., which has its own completely equipped railroad for training purposes, G. I.'s are taught to run trains as well as to fight, to repair and service locomotives, to keep all types of rolling stock in running order.

Then, after their six-weeks military basic, selected G. I.'s from Eustis are sent to Baltimore to be further instructed in the art of railroading by regular employes of the Baltimore & Ohio, who tell the rookie railroaders how to do it.



In Korea as in Every Other War Theatre Army Railroad Battalions Again Demonstrated their Value, and G. I. Railroaders Trained at Fort Eustis, Va. and at Baltimore, Md. Made a Name for Themselves in the Combat Areas



Left: Learn to do by doing. Traditionally, there's the right way, the wrong way and the army way. But when it comes to army railroading, there's the railroad way, too. G. I.s get it from B&O men at Baltimore, Md.

★

Below: Army trainees selected from railroad units at Fort Eustis, Va. are sent to B&O shops at Baltimore where regular employes teach them specialized shop work —boiler and engine repair, plumbing and pipe fitting, and milling operations

Right: Veteran railroaders know it's possible to snafu even such a simple operation as the throwing of a switch. At Baltimore B&O switchmen show G.I. rails, who also learn techniques of track laying, inspection and maintenance of right-of-way

★

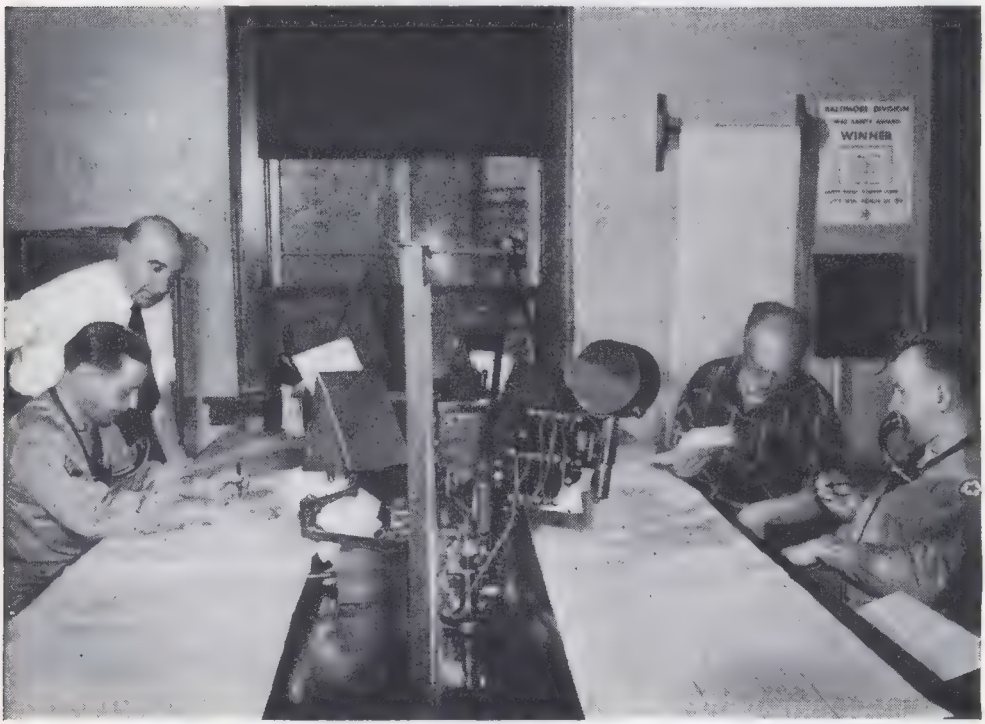
Below: G.I.s study the complexities of a steam locomotive at Fort Eustis, Va., which is equipped with its own railroad complete with motive power, both steam and Diesel, rolling stock and shops. G.I.s get six-weeks basic at Eustis, after which selected groups continue training with major railroad for 90-day period

THOUGH TRANSPORTATION CORPS trainees are not taught every aspect of railroading in detail, they are given ample opportunity to observe correct methods used in the industry as a whole. Thus, a man who is trained as an engineer can also learn something about the complexities of train dispatching, centralized traffic control, block signalling, interlocking plants, hump yard operations, radio communication and other operations. On completion of his training, the soldier-railroader is ready for assignment to military railway service anywhere in the world

AFTER COMPLETION of army indoctrination period, trainees are given instruction on the locomotive, both steam and Diesel, and on various types of rolling stock. *Right:* Staff sergeant demonstrates action of vital link in steam engine valve gear which speeds or retards admission of steam to cylinders

★

Below: Dispatcher's office is the nerve center of any functioning rail system. Here army trainees work with B&O train delayers on the Baltimore Division of the B&O. This is the final stage of G.I. rails' on-the-job tour of duty with civilian railroad. When it is over they will return to Fort Eustis for assignment to regular Transportation Corps battalions



Locomotives of the

RICHMOND FREDERICKSBURG & POTOMAC

The Capital Cities Route

Diesels

Model	Numbers	Drivers	Horsepower	Engine Weight	Tractive Effort	Builder & Date
			B-B (Switcher) Type			
SW-1	50	40"	660	199,400	50,000	EMD, 1939
404	51, 52	40	1000	230,000	57,500	Alco, 1942
404	53, 54	40	1000	230,000	57,500	Alco, 1943
404	55–57	40	1000	230,000	57,500	Alco, 1944
404	58–61	40	1000	230,000	57,500	Alco, 1946
404	62–71	40	1000	230,000	57,500	Alco, 1948
			A1A-A1A (Passenger) Type			
E8-A	1001–1005	36	2250	322,070	52,410	EMD, 1949
E8-B	1051–1055	36	2250	310,750	50,675	EMD, 1949

Model	Numbers	Drivers	Horsepower	Engine Weight	Tractive Effort	Builder & Date
B-B (Freight-Passenger) Type						
FP7-A	1201–1203	40"	1500	257,357	61,133	EMD, 1950
GP-7	101, 102	40	1500	252,384	61,186	EMD, 1951
B-B (Freight) Type						
F7-A	1101–1108	40	1500	230,153	56,161	EMD, 1949
F7-A	1109, 1110	40	1500	230,153	56,161	EMD, 1950
F7-B	1151–1158	40	1500	233,179	57,007	EMD, 1949
F7-B	1159, 1160	40	1500	233,179	57,007	EMD, 1950

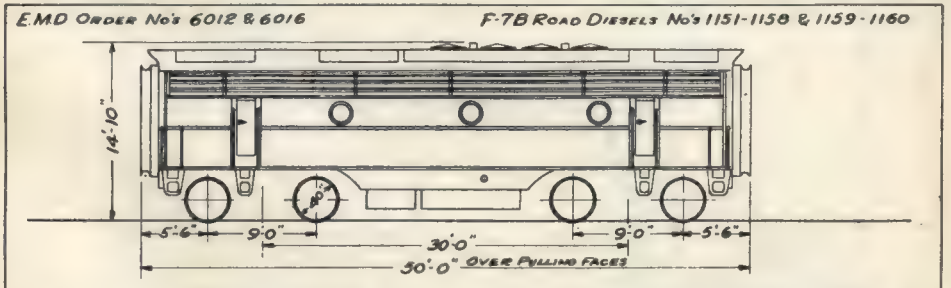
Steam Locomotives

Numbers	Cylinders	Drivers	Pressure	Engine Weight	Tractive Effort	Builder & Date
0-6-0 (Switcher) Type						
46	21 x 28	51"	200	170,000	41,200	Alco, 1925
0-8-0 (Switcher) Type						
73	24 x 28	51	210	229,000	55,460	Alco, 1918
74	24 x 28	51	210	229,000	55,460	Alco, 1923
91, 92	26 x 28	53	215	259,000	65,360	Alco, 1923
2-8-4 (Berkshire) Type						
571–580	25 x 34	69	245	434,000	64,100	Lima, 1943
4-6-2 (Pacific) Type						
301–305	26 x 28	75	200	319,600	42,800	Alco, 1918
306	26 x 28	75	225	319,600	48,266	Alco, 1918
4-8-4 (Northern) Type						
551–555*	27 x 30	77	260	466,040	62,800	Baldwin, 1937
601–606**	27 x 30	77	260	407,810	62,800	Baldwin, 1938
607–612**	27 x 30	77	260	409,400	62,800	Baldwin, 1942
613–622***	27 x 30	77	260	415,000	62,800	Baldwin, 1945

*Engines 551-555 are named after Confederate generals. These are: No. 551—Gen. Robt. E. Lee; 552—T. J. Jackson; 553—J. E. B. Stuart; 554—A. P. Hill; 555—J. E. Johnston.

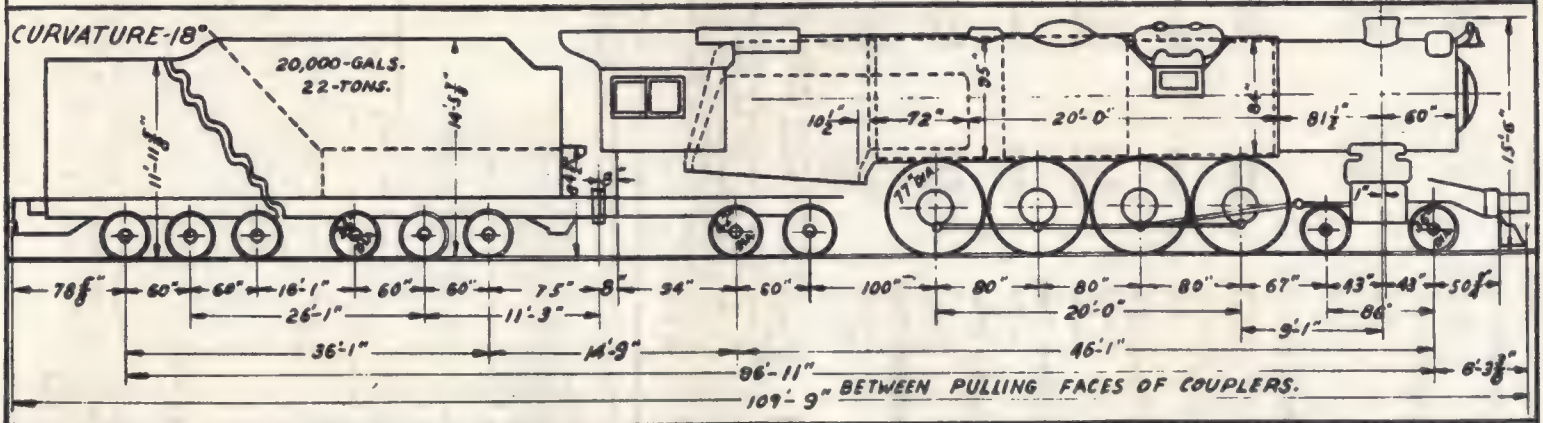
**Engines 601-612 are named after Virginian governors: No. 601—Gov. Patrick Henry; 602—Thomas Jefferson; 603—Thomas Nelson; 604—Benjamin Harrison; 605—James Monroe; 606—John Tyler; 607—Edmund Randolph; 608—Henry A. Wise; 609—John Letcher; 610—Fitzhugh Lee; 611—William Smith; 612—Claude A. Swanson.

***Engines 613-622 are named after Virginian statesmen: No. 613—John Marshall; 614—George Washington; 615—Henry Clay; 616—George Mason; 617—John Randolph; 618—James Madison; 619—William Byrd; 620—George Wythe; 621—Richard Henry Lee; 622—Carter Brayton.


EMD Order No's 6012 & 6016
F-7B Road Diesels No's 1151-1158 & 1159-1160
14'-10"
5'-6"
9'-0"
30'-0"
9'-0"
5'-6"
50'-0" Over Pulling Faces
One Air Comp - 180 Cu Ft At 800 R.P.M.
Loaded Wgt - 233,179 Lbs (Max.)
Wgt. On Drivers - 233,179 Lbs. (Max.)
Tractive Effort - 57,007 Lbs
Gear Ratio - 61/16
Max Speed - 71 M.P.H.
One - 16-567B GM Engine - 8½" x 10"
Total H.P. - 1500
Air Brakes - 24 RL
Main Generator - One EMD Type D-12-600V D.C.
Capacities - Fuel Oil - 1200 Gallons
Cooling Water - 215 Gallons
Lubricating Oil - 200 Gallons
Sand - 16 Cu Ft.
Journals - 6½" x 12"
Traction Motors - 4 EMD Type D-27B
Storage Battery - Gould - KMH. - 25 R
Builder - Electro-Motive Division - Purchased Dec 1949
Units 1159-1160 Equipped With VAPOR-OK-4740 Steam Generator.

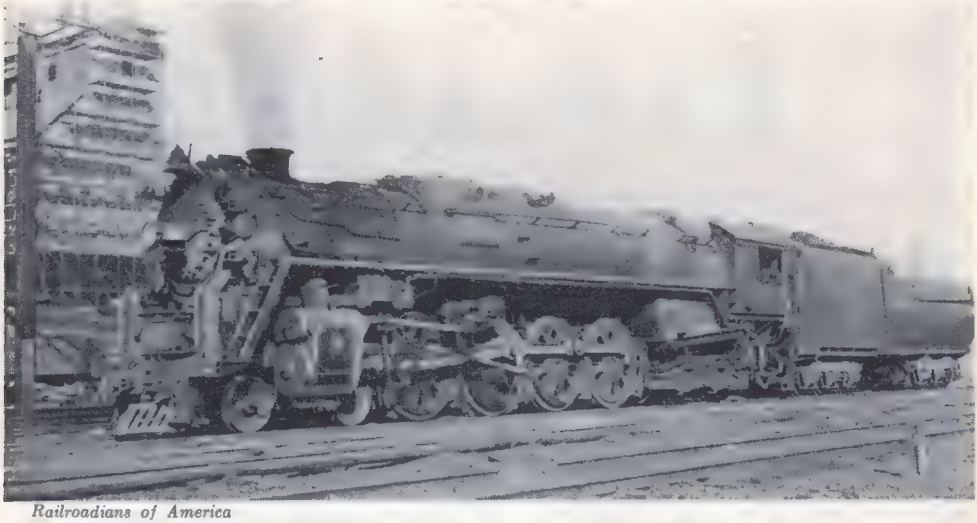
RF&P has leaned towards Electro-Motive Division Diesels as freight haulers in the past four years. F7-A model No. 1104, ***opposite page***, was outshopped in '49. The F7-Bs (Nos. 1151 through 1160), ***diagram above***, came out around the same time

ENGINES 613-622



Boiler Pressure	260 Lbs.	Superheating Surface	1,325 Sq. Ft.	Valve Travel	7 1/2"	Weight on Drivers	266,500 Lbs.
Firebox at Grate	90" x 138 1/4"	Heating Sur. Tubes	2,215 Sq. Ft.	Exhaust Nozzle, Dia.	8 1/2"	Weight on Eng. Truck	62,700 Lbs.
Firebox, Crown & Sides	3/8"	H't'g. Sur. Flues	1,550 Sq. Ft.	Reverse Gear	LEWIS	Weight on Trail. Truck	85,800 Lbs.
Firebox, Back	3/8"	H't'g. Sur. Firebox	403 Sq. Ft.	Feed Water Heater	WORTHINGTON-SSA	Total Weight of Eng.	415,000 Lbs.
Flue Sheet, Front	5/8"	H't'g. Sur Arch Tubes	18 Sq. Ft.	Booster	NONE	Weight of Tender	387,500 Lbs.
Flue Sheet, Back	7/16"	H't'g. Sur. Syphons	7.9 Sq. Ft.	Mechanical Stoker	STANDARD H-T.	Total Wt. Eng. & Tend.	802,500 Lbs.
Tubes 54	Dia 5 1/2"	Total H't'g. Sur.	4,285 Sq. Ft.	Superheater	TYPE "A"	Tractive Force	62,800 Lbs.
Flues 189	Dia 2 1/4"	Valve Gear, Type	WALSCHAERT	Automatic Train Control	U.S. & S.	Ratio of Adhesion	4.24
Tubes & Flues, Length	20'-0"	Steam Ports, Width	2 5/16"	Headlight Generator	2 - RE-36-750 W.	Tender Type	RECTANGULAR
Grates, Type	FIREBAR	Lap	1 7/16"	Driving Journals, Main	13" TIMK. R.B.	Tender Cap'y, Coal	22 Tons
Grate Area	86.5 Sq. Ft.	Lead	1/4"	Driving Journals, Other	11" TIMK. R.B.	Tender Cap'y, Water	20,000 Gal.
Cylinder Bore	27" Stroke 30"	Exhaust Clearance	1/4"	Engine Truck Journals	7" TIMKEN ROL.B.	Built by	BALDWIN - 1945
Cylinder Spread	92"	Eccentric Throw	1 3/16"	Trailer Truck Journals	7 1/2" " "	Builder's Class	4-4-4 - 27S, 134 - 143.
				TENDER " "	6 1/2" " "		

You're looking at a *Statesman*, RF&P naming its '45 Baldwins for noted Virginians—Washington, Madison, Clay, etc.



Railroadians of America

Road's 4-8-4s are ***big wheels*** in more ways than one—77-inch drivers and named after noted Confederate generals, Virginian governors and statesmen, suh! No. 610 is the ***Gov. Fitzhugh Lee*** (Robert E.'s nephew)

Richmond, Fredericksburg & Potomac

Lima nameplates are rare on RF&P motive stock, but don't overlook No. 574, ***above.*** Close to 40 percent of the steam engines have been scrapped since 1950; there isn't much power older than the road's Alco ***Pacifics.*** No. 303, ***below,*** is one of them

Richard E. Prince Jr.

AVALANCHE

EDMUND E. PUGSLEY

WALT McKEE stood beside his stubby-nosed engine on Twin River platform, watching Tip Calhoon ease the helper onto the troop train. When Tip had made the coupling to the brakeman's satisfaction, he slid his chunky frame down the ladder and jerked a thumb toward the rear of the fifteen-coach train, where a fur-coated figure was just emerging from the station doorway.

"Looks like the Duke figures on doing some back-seat driving this trip," Tip grinned.

Walt rubbed his long, sensitive nose and nodded. "He'll be in the

When they had dug down into the buried snowplow, they began passing out the stretchers, one by one

O.C. quarters all the way up the pass, telling them how he keeps his mountains and men under complete control."

Tip snickered. "You still love him, I notice. Anyway, he won't be up here under our feet. They tell me he's promised the army a record run with the two best engineers on the Skyline division."

Walt shook his head. "Spring is just around the mountain, Tip. Anything can happen up there where we're heading. 'Specially under that old Sultan. I didn't like his looks yesterday, coming down. You boys want to keep your eyes peeled for that character today. My guess is, he's about ready to break diplomatic relations."

Tip lowered his voice to a husky whisper. "You think he's had a flash from old Joe Stalin that we're pulling the army, Walt?"

Walt grunted. "You just keep that big red nose of yours pointed up the railroad, all the way. I don't want my gal a widow before she's a married woman."

Tip chuckled. "Better get perkin' on that, you two, I've been kind of putting my oglers on that Redrock cutie myself, lately."

"That's okay," Walt grinned. "Just so long as I don't catch you with anything more'n your oglers on her."

Silent Si Knight, the skipper, was rocking up the platform with a fistful of orders. Walt moved closer to Tip.

"It won't be long now, for Vera and me," he confided. "Soon as we can find a decent place here in Twin River, and get it fixed up the way we want it." He twisted around to stare off up the pass, but not before Tip had glimpsed the mist in his serious blue eyes.

"Well, good luck to you!" Tip replied fervently. "She's a grand little girl!"

Si passed them each a set of flimsies.

"The Duke's riding," he grunted. "Wants a new record, like he was ordering fresh coffee."

"What's new about that?" Walt asked calmly. "That's his middle name."

"What?"

"Record."

"Huh. He'll be clocking you."

"Good for him." Walt reached for his grab. "You ready, skipper?"

"Go."

Tip ran for his engine. Both whistled off and dropped sand. The Twin River valley was filled with black funnelled smoke and the roar of two mighty exhausts. Then the troop train was wiggling up around the bend and ducking into the narrowing canyon that led up the fifty-mile ascent over Skyline pass.

HALF an hour later they roared into Redrock with half the climb accomplished. Operator Vera Baldwin's red sweater was in the bay window as she flipped a highball to Tip, and followed it with a lip salute to Walt from the tips of her fingers. The order board was up and they stopped the troop train with the second coach opposite the station door, handy for the Duke and his fur coat. And that's when the Duke's plans for a record got its first kick in the teeth.

Herb Wiley, conductor of the snow plow crew, was heading for the station, and he stopped under Walt's window to spread the news.

"Looks like you're hooked here for a while, Walt," Herb told him. "The watchman just phoned from Little Loop about a slide. Guess we'll be high-tailing up there ahead of you."

Walt whistled softly.

"The Duke is gonna be real happy about that," he commented, reaching under his seat box for his lunch kit. "He sure slipped up on that one. Must have overlooked putting out an order annulling all slides for the day."

Walt eased himself down the ladder and started back for the station as the Duke's fur coat disappeared through the office door. When he got inside the superintendent had already brushed past the lady operator and was shouting into the telephone.

"Murray talking from Redrock, chief!" Just as though the chief wouldn't know that without a telephone. "We're doing fine! Cut ten minutes from your schedule so far. I expect we'll do even better from

here on up, account of . . . How's that, chief? Slide? No! Oh, dadburnit! We can't have delays to this army train chief. I promised the O.C. I'd—Oh, fire'nfury, chief! Oh . . ." He swung on his heel as a snicker broke from behind him, but the three faces there were all stony formal, and Vera's was buried in her writing. The superintendent turned back to his telephone and resumed talking in a martyr's voice.

"Let's hear your plans then, chief. But make 'em short."

There was a hush in Redrock station while Duke's overshod feet shuffled impatiently, and his throat emitted an occasional grunt. But at last he sighed a reluctant okay and turned to Vera.

"He wants to give you an order for the plow," he growled. Then he looked sharply at Herb Wiley. "Of all the confounded luck!" he fumed. "Miles of snowsheds through these crazy mountains and the only place they could spill a little job like that was in there where we never had any sheds—and right on the nose of the most important train of the year!"

Old Herb nodded. "Most inconsiderate mountains in all Canada, these here Skyliners, Mister Murray," he drawled.

Herb winked at Walt and ducked. Walt switched the subject.

"Good time to get a bite to eat. How's the coffee, Honey?" He picked up the coffee-pot from the big stove and shook it.

The Duke glared his resentment. "You're the engineer on this troop train, aren't you, McKee?"

Walt nodded casually, pouring steaming coffee. "One of them. The most important one, I'd say," he added gravely. "Have a cup of coffee?"

The Duke's face darkened. "Seems to me your place is in your cab, ready to move when you get a signal."

Walt nodded again. "I'll be there, Mister Murray, when the signal is ready for me." But his face slowly took on a frowning cloud. He looked at Vera, then at Si. "That was right about a tie-up here, for a slide?" he asked. "Up at Little Loop?"

"No reason why we should tie up here," the Duke snapped. "We'll follow right along behind the plow. Save time. It's only a small blockade."

Walt shook his long, lean head. "I wouldn't like to see us do that, Mister Murray. That's a bad place to wait, this side of Little Loop, right under the Sultan."

"How's that?" the Duke blustered. "Bad place? Don't be ridiculous!"

Walt cleared his throat and rubbed his hand down the back of his neck. Vera knew the sign. He was brushing at the hair that the Duke's rebuke had lifted. She edged around behind him, pinching his arm warningly. He glanced at her, stood doubtfully, then without another word, he gathered up his lunch kit, gloves, cap and mackinaw and started slowly for the door. They all watched him nervously, waiting for him to go before settling to their own jobs. But with his hand on the latch, Walt again paused and came back. Carefully he set down his lunch kit and mackinaw and faced the superintendent.

"It may be ridiculous, like you say, Mister Murray," he said, soft as melting snow, but just as cold. "But these mountains don't work by the rulebook. I still say it's bad business, taking a trainload of human freight up there to sit around under old Sultan while the plow digs out that slide."

"Why?" the Duke barked.

Walt let his eyes rove around over each of the others before he replied.

"Why?" he repeated a little more gently, as though trying his level best to be patient with someone who shouldn't be quite so thick between the eyes. "Because it's dangerous, Mister Murray. Dangerous to life and property. First, we might have a slide behind us, or between us and that plow, and that might put us in a pretty tight spot, see? And then—you never know—old Sultan might get a playful notion and slip down enough of that snow he's been nursing all winter to bury the whole shebang of us deep enough so they wouldn't find us till the slide lillies poke through next summer." Walt

straightened his lean shoulders and looked squarely at the superintendent. "That's why I think it's bad, Mister Murray."

The Duke's sleek round face was working like a kid's with fresh chewing gum. He let his eyes close until he could just see Vera through narrow slits. Then, as though he found his answer, he swung back to Walt.

"There wouldn't be anything personal in this, would there, McKee?" And when Walt just gaped at him he went on: "It would be very nice, of course, to provide a cosy little visit for you and your lady friend here. But it'll have to wait till some other more convenient time."

Walt was rubbing the back of his neck again when Si moved in between them. Vera shook her head quite openly and Walt's throat did a couple of gallops up and down before he found his voice.

"Mister Murray, I'm just trying to show you—show you how. ."

"Exactly," the Duke cut in. "Show me how to run my business. Well, let me tell you I can handle that without your special help at this time. And, for your information, I can assure you I checked the records of this division thoroughly, every mile of it. There hasn't been a snowslide of any consequences on the Sultan section for over twenty years. Does that relieve your worry, McKee?"

Walt slowly shook his head. "No." He glanced at the others with a resigned shrug. "You're still a prairie gopher to us dumb mountain folks. A mighty good official—with a pencil. The trouble with these fool mountains is, they don't understand arithmetic and record figures." He tugged at his long nose as though he'd run out of power. Then he went on. "One thing you didn't mention from the records, Mister Murray. There hasn't been any fires on that Sultan slope for much longer than your twenty years, not till last summer. It always carried a nice thick stand of timber till then. But right now you can't find enough timber up there to make a good Christmas tree. That's why we're worrying."

The Duke seemed to ponder this a little uncertainly. Walt waited for his answer, then decided to go on to a finish.

"Yesterday, when I rode down under the Sultan, I looked it over pretty thoroughly, Mister Murray. You can call it worry, or hunch, or premonition. Or maybe it's just that I've lost my nerve again like that time you fired me. Whatever it is, I've got a mighty good case of the fear of God in me right now. You're tempting Providence, if you insist on taking this train up there before the line is clear. That's the story, mister. You can take it from here." This time, when Walt McKee picked up his lunch kit and mackinaw, he went right on out into the late March morning.

VERA was first to stir. She sorted her list of train orders nervously and passed the set for the plow crew to Herb Wiley. The Duke was scowling out the window. Si broke the spell with a sharp question.

"Well, what about it? Are we trailing the plow?"

The Duke swung around.

"Oh, leave them here!" he growled. "Tell the chief I'll ride up with the plow and report progress by telephone." Then he hurried out after Herb Wiley. Si followed to give the army officers the bad news.

The plow outfit roared off up the pass. And presently there was a stir from the coaches as troops poured out carrying a variety of equipment, all sizes and shapes, some like sections of a great hose, and a few lugging a heavy piece that might be a portable engine, with parts and appliances. They headed up the wye track toward the mountain bluff. Two of them paused in front of the station window to wave at Vera.

"Hi, sister! Hi, Vera!" they chirped.

"The Zinsky boys," Si grinned, coming back to flop in a chair. "From Pete Larson's gang, remember? They joined the army last fall. Tired of fighting snow all winter. So they join the army's snowfightin' unit!"

"Is that why they're lugging all that

equipment up the wye?" Vera asked.

"Sure. Exercise maneuvers, in that old snowslide. They'll get plenty there. Must be forty, fifty feet of it under that bluff. Got a tunnelling outfit with a light cribbing in sections they can slap in fast as they dig. I heard those young Zinskys helped figure out this idea from a combination of rotary plow and sawdust blower they saw down in Seattle."

"Did you see Walter anywhere?" Vera asked.

"Gone up to watch the boys." Si settled to a doze.

It was an hour before Walt came back. Si stirred and went out. Walt sat staring silently out the window. Vera moved over to join him. He looked up glumly and shook his head.

"It'll be all over the division that I've lost my mind, what was left of it, talking like that to the superintendent. There ain't room for him and me on this division, seems like." He stood up and shook back his shoulders. "Guess I was crazy to come back here after I got that insurance job all lined up down at the coast." He turned for the door but Vera headed him off.

She put her hand over his mouth. "You'll stay right here, you big lug, till—till we see who was right about old Sultan. If you're wrong, I'm going with you. I can sell insurance too—if a nut like you can sell it!"

The telephone jangled. The Duke's voice rasped in Vera's ear.

"Superintendent speaking, Miss Baldwin. The line is clear again. The plow will be down in half an hour. Round up that crew and get their orders ready so they can leave the instant we get in. That's all now."

Vera told Walt and he went to find Si. Soon the men were filing back aboard the coaches. Vera called the dispatcher and wrote new orders for the troop train. Walt studied the clock and tried to grin.

"Old Sultan's still got time to make good for me," he murmured.

Si grunted, "Better get walking for your engine before the Duke catches you in here again. He'll be like a crazy man."

"That'll make two of us. I'll be like a crazy man till I get this train up clear of old Sultan now."

"Yeah. And you'll be crazier if nothing happens. You and your fear of God stuff,—you'll be all washed up on the Skyline."

"Fine," Walt breathed. "Good thing." He moved for the door.

"Time that plow was in long ago," Vera said. "Mister Murray called nearly an hour ago. You don't suppose—" She broke off to listen as a faint clicking came from the telegraph key. She slipped into her chair. "Something queer," she murmured, holding up her hand for quiet. "Line's out to the east . . . someone trying to get through." She started writing. One word . . . Another word. A third . . .

Walt came over beside her.

"I got just some of this," she whispered, pointing at her pad. He read the three scribbled words. Sultan . . . slide . . . plow. Then came the initials, D.M. "That's Mister Murray's initials. Oh, Walt, do you think there's been more—wait! Here's dad working on it from Twin River."

The weak clatter on the telegraph key surged and faded again, finally dying out entirely. Vera was reaching for the telephone when it rang with the Redrock call.

"Hear that call, Vera," the chief dispatcher spoke. "It's not good. The way I figure it, the plow's been caught on the way down, somewhere around Sultan Mountain. That was the Duke's initials, like he was using broken wires . . . Lord help them, girl," he muttered, "if they're all buried. We can't get the auxiliary up there under three hours. And it'll be a hand shovel job then, with the crew all in there. We couldn't dare use the rotary. The Duke must have been walking back from that telephone call—"

Vera heard her father's heavy sigh as he switched off.

"It's happened, Walter!" she moaned. "Just like you said. It's the plow, dad says, caught in a slide at Sultan. Mister Murray, he thinks, must have been walking back to meet them from the telephone.

That's how he wasn't in it, too. Oh, Walt, it's awful! The auxiliary can't get up there for three hours. Those poor fellows will all be—be smothered to death, if they're not killed outright."

Walt's face was like snow as he walked to the window, and stood there staring up the track. Suddenly he swung on the conductor, gripping his shoulder as he talked.

"That army stuff, Si. Why couldn't we get that? It might work! Or maybe—Why, sure they'd go up and use it! We could cut off half a dozen coaches . . . Let's get hold of the officers! With two engines, we could make it up there in no time!"

Vera watched Walt bolt through the doorway, his lower lip jammed between his teeth like that night when he was coaxing the big locomotive down the grade to stop the runaway train. "I'll have to break him of that," she thought. "Some day he'll bite that lip right off—the crazy big lug!"

Back at the telephone she had to do some fast talking to get the trick dispatcher to put her dad back on the phone. And then she was telling him all about the snow-fighting unit and Walt's plan to put the army to work. The chief heard her through without a word of interruption, but she could hear his breathing grow tenser as the plan took hold of him.

"It might work," he said, as she stopped for breath. "It's worth a try. Anything's better than this sitting here waiting while we get the auxiliary moving all that way . . . We'll send it anyway, but give Si a clearance and get him moving." She heard the little catch in his breath again, like he was going over the plan's routine, checking against mistakes. "We'll need someone to report, see if Si has a portable phone—"

"And an operator," Vera interrupted. "Someone to take your orders and help with messages. Let me go, dad."

She heard him grunt. "Four, five hundred men, and you want to be the only woman!"

"I want to help. I'm no use here. The brakeman that stays with part of this train can keep you posted here. Let me go, dad!" she pleaded.

"Okay," he agreed reluctantly. "Watch your step."

"Thanks, dad." She tried to keep the quaver out of her voice. "I think this is going over big with the troops. They're running past here like mad now. Look, dad—I'll get that trainman to give you the rest of it. They might get away and leave me. Bye now!"

"Good-by, girl—and be careful! We'll be waiting to hear."

SHE dropped the receiver and snatched up her coat, overshoes and pencil and order pads, dropping them into her bag. The brakeman was in between the coaches, disconnecting hose lines, when she got outside. She let her glance run up along the train, counting half a dozen coaches with the baggage car. She saw Walt's lean frame waiting for a signal from the second cab. Tip was on the leading, helper engine. With only six coaches they'd sure enough make it in jig time, as Walt had said. She'd better get on.

Si came back and she told him she was going along.

"Chief's orders," she said, when his jaw dropped like he thought she'd gone crazy. She called to the brakeman, telling him to ring the dispatcher, and then they were moving, with a roar of exhausts echoing back down the pass—moving out through the great trough of snow that cushioned the sound down till she could hear her own panting breath as she stood alone on the last vestibule. They leaped over trestles or steel spans with a sudden hollow roar that sent a chill through her, and she wondered about Walt and his hunch, or fear, or whatever it was that made him like no other man on the Skyline. And she wondered, too, whether a man named Duke Murray was thinking about the same thing just about now—or whether he, too, would be silenced with the others.

And then, almost before she thought it possible, she felt their speed slacken, and peering ahead, she could make out the

grim bulk of Mount Sultan. For a minute they moved ahead with caution, then stopped. When she looked into the coach, it was empty. The men had poured out through the other coaches. She got down and started alongside the train, trying to keep from looking up at the gash where the slide had come down. Up near the baggage car she met Si Knight holding the emergency telephone he'd just hooked up near the end of the dangling wires. Si was looking up at the mountain.

"Sure looks bad," he said. "Not much chance for those boys, buried under that pile. Poor old Herb. Guess we've got Walt to thank it isn't us."

Vera wiped her eyes and took the telephone.

"It's all cut through," he told her. "I'll go up ahead. Back if anything shows. Don't be scared, Vera. Not much more left to come down right about here."

She watched him pass around the engines and stop. The fireman's head came out and he pointed back. Talking about Walt, likely. Coming back through the coaches, maybe. She wondered how he could be feeling now—all this terrible slide down, just like he'd predicted, and feared so much.

"Maybe they won't think he's so crazy now," she breathed.

Then she saw snow blowing out over the canyon on the other side, coming from the tunnel they were digging. The army boys had their equipment in action already. She cranked the telephone.

"They've started tunnelling, dad." she told her father.

"Good work! Just forty minutes since the Duke called. But the Lord only knows how long he was getting in that call. See anything of him?"

"No. Not yet. I'll call you if I do."

She watched the snow pouring out faster now and thought how lucky they were to have the canyon, fifty feet deep or more, to pour it into. Then she wondered why Walt hadn't come. The cribbing sheets were passing clock-like into the tunnel now. And as she watched she saw a stretcher disappear. Her heart skipped a beat. Soon she'd be seeing the bodies coming out—if they were lucky enough to find them. She wanted to tell her father but waited, till she knew definitely. No need to stir up hopes . . .

Then a stretcher came out—passed from man to man on an endless chain of arms! Si Knight broke from the group and came waddling toward her.

"The first man's alive," he said. "Can't say who he is yet. They're passing him right into the ambulance car for oxygen. He's one of that extra gang Herb picked up."

Vera called her father. "Dad, it's—it's going to be all right! The first man's alive! They're giving him first aid."

She heard his deep sigh. "That's fine, Vera. Fine." Then, still listening, she caught the murmur of a dozen voices, and then a more distant yell. Twin River was waiting. And listening. And praying.

From where she stood in the snow, Vera could see the second stretcher passed along on that endless chain of human arms. She spoke again to her father, and he stayed right there now, taking her every word and relaying it to the anxious folks behind him. Ten minutes of more stretchers. Twenty. Thirty. Then Si came with a list of names.

"The Extra Gang boss is okay. We got names of all his men. That makes a total of thirty-one all accounted for. Just the Duke missing now. Kind of funny where he's got to. Must have been right around here some place when he put in that Morse call."

Vera looked toward the engines. "Seen anything of Walt since you went up ahead?"

"Nope." He shot a funny look at her. "Just like him to go looking for the Duke, so he could tell him off."

She shoved the telephone into his hand.

"Tell Dad the names," she said, and started running along the track, back around the end of the train. The telegraph line ran along the other side of the track, next to the canyon. If Mister Murray walked back up here from the watchman's telephone shack, he'd be likely to make

that call from where the wires were broken, like Si said. She found the sagging telegraph line and followed it back around the curve. Then the line disappeared over into the canyon. She leaned out as far as she dared but saw nothing. Walking farther along, she saw footsteps in the snow. They went over the bank. She edged out cautiously, then sat down, easing herself over foot by foot, hoping to see where the foot marks went. Then the bank dropped straight away and the marks disappeared. She thought she could see something away down there—something that could be a man, or two men. But in the gathering dusk she couldn't be sure. Her voice, when she screamed, seemed pitifully small and inadequate.

"Walter! Is that you? Can you hear me, Walter?"

She thought she heard a shout and inched a little farther. That did it. Something let go under her and she was hurtling through space. And then she was floundering and spluttering in a deep bank of snow. Before she could get free to stand on her feet, a hand gripped her arm and yanked her up.

"Vera! You crazy fool dame!" Walt was panting, wrapping his long arms around her, then slapping the snow from her in turn.

"Oh, Walter," she spluttered. "I just knew you'd be down here, somewhere!"

"Why?" he asked. "How'd you figure that out?"

"Same way you figured the Duke was down here—he is down here, isn't he?" She twisted to look over where he'd been, when she fell. "Is that him over there?"

"That's him. Got a broken leg. He wasn't lucky, like we were, to fall in a snowbank. He hit a rock . . . And then the son-of-a-gun crawled all the way over to those loose wires to send that call. That's what I call guts, Honey! He can take it, that guy. Sure was lucky I found him before dark. He was all but buried. Look, here's where he tried to get back up the bank, and couldn't make it."

"Is he—all right?" she asked anxiously.

"He's okay so far. But we've got to get him up out of here soon. That fur coat helped keep him warm. Look, Honey, we got to figure a way to get out of here. It's getting dark. The boys mightn't find us . . ."

"I think they will. Si saw me come this way. He figured you'd be after Mister Murray—to tell him off, he said. Did you —say anything about your quarrel?"

Walt snorted. "That stuff'll keep. What we've got to do now, is figure how to get him out of here. I put a couple of rough splints on his leg, but we can't—in this dark, too."

"There's a light, Walter! They're coming along the bank. Give them a yell!

It got dark in a hurry down in that canyon while they waited for the army boys to rig slings. They had to stick close together. The Duke didn't seem to mind how close his rescuers stood after they'd told him all the men had been dug out alive.

Once, just before the boys came, the Duke groaned and seemed to want to talk. Walt doubled down to hear.

"The fear of the Lord is the beginning of wisdom, McKee," he said wearily. "You're a queer sort of duck, but you know your mountains. Like you say, they don't understand arithmetic, but they can sure enough put the fear of God into a man—'specially a dumb prairie gopher like me." His face managed a wan smile. "Any time you feel it coming on again like that, you just come a-running. I'll drop the pencil and the records, too."

Walt found his girl's hand in the darkness, gripped it wordlessly.

Everything was going to be all right from now on. That hunch he'd really bet money on!

TO TRY to determine whether the country grew with railroads, or the railroads grew with the country, is too much like the chicken-and-egg problem. The point is that they have grown together, and that in the process the railroads have become an essential to our very lives and to our continued economic progress and prosperity . . .—Gwilym A. Price, President, Westinghouse Electric Corporation, Pittsburgh, Pa., before the New York Railroad Club

FIDDLETOWN & COPPEROPOLIS RY.

No. 43 March Winds and Visiting Sailors *by Carl Fallberg*

Save the Day When Fuel Runs Out at Big Indian Flats

Yale Camera Exchange of Denver, Courtesy of Rio Grande Green Light

TO CREATE a realistic collision in Paramount's *The Denver and Rio Grande*, a generous amount of dynamite helped, besides producing repercussions

On the Spot

Our Readers Talk It Over With the Editorial Crew

HEAD-ON collision of two narrow-gage trains marked the high point in the filming of the Paramount color photoplay *Denver & Rio Grande* in Colorado mountains on the Santa Fe's never-built subsidiary, Canon City & San Juan.

The cornfield meet took place between Nos. 319 and 345 (renumbered for the occasion 116 and 268). Each engine had a short freight train and was loaded with dynamite and black powder, which, with the aid of mortars in the track, made a spectacular explosion.

Both engines remained upright on the track and two freight cars were shattered. A shoo-fly built around the spot enabled regular trains to get by. Later, a work train brought in the two engines to be stripped at Durango and the metal was loaded onto flatcars for Pueblo steel mills.

The deliberate wrecking of two engines, described in *Narrow Gage News*, stirred up railfan resentment. Lucius Beebe, railroad historian, sent a hot protest to the *Denver Post*. Railroad management said the narrow-gage locomotives would have been scrapped anyway, so why all the fuss?

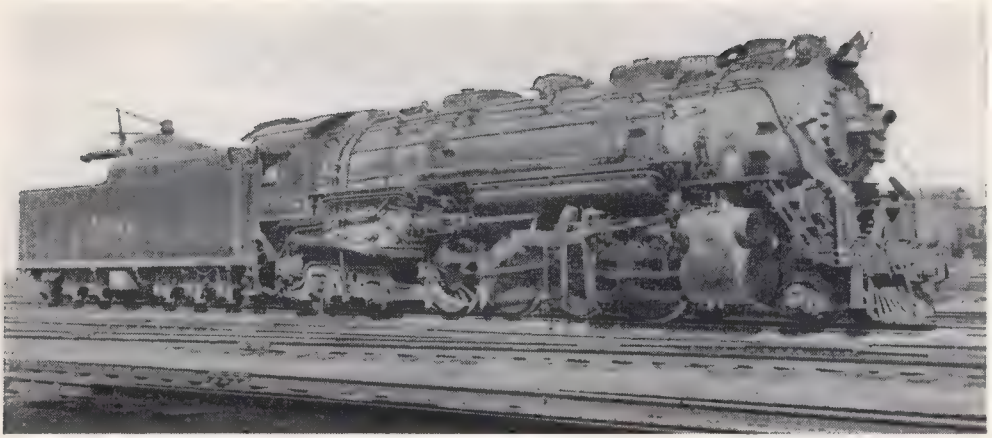
A sharp contrast to that viewpoint was expressed in a newspaper clipping from Cecil H. Gledhill of Buller Road, Reefton, New Zealand, who said: "The regard which railwaymen have for their engines was well illustrated during the holidays when railwaymen at Reefton voluntarily formed a working-bee during the strike period and polished, painted and generally refurbished one of the old UB locos to such fine style that she is now nearly, if not more, shiny and impressive than the day she was first brought into commission."

WHISTLES from retired Southern Railway steam locomotives are being given to factories along the Southern line. "We like to think of the whistles of these old locomotives," says Ernest E. Norris, president, "together with the many old locomotive bells we have given to churches, as still 'belonging' to the people of the South, still serving, in another way, the communities they served faithfully for so many years."

By blowing the "cow-on-the-tracks" whistle signal, a series of short sharp blasts, at 2:30 one morning a Canadian National freight engineer who had seen a fire in a lumber yard at Mount Brydges, Ontario, saved the village. A drover living near the mill was awakened by the signal. Fearing that some of his herd might have strayed onto the tracks, he leaped out of bed and was startled to see a pink glow in the sky. Thereupon he aroused the village and, according to Roy Northcott, assistant fire chief, saved it.

The haunting wail of the steam engine whistle, now unhappily on its way out, costs quite a sum. The *Southern Pacific Bulletin* comes up with surprising figures. Taking the 265-mile route between Houston and Dallas as an example, it finds that the cost of whistle-blowing on this stretch alone exceeds $15,000 a year. Locomotives on that route average 6268 blasts a day at crossings, towers and stations. The cost of fuel for each toot is two-thirds of a cent.

Haywire Mac's "Blow That Whistle" (Nov. '51) prompted H. Reid of 179 DuPont Circle, Norfolk, Va., to remark that both he and his railroad pal, A. A. Thiems of 3905 Floyd Avenue, Richmond, Va.,



carry tape recorders with them on most of their week-end jaunts and assuredly on their annual summer trips which average between 2000 and 3000 miles.

"I specialize in Virginia train and whistle sounds," he adds, "while Thiems works with the Norfolk & Western and Chesapeake & Ohio. Virginian passenger engine whistles are deep and sound like tug-boats."

Stewart Park Jr., Mamaroneck, N. Y.

WORKING AGREEMENT. The Rutland and the Boston & Maine have an agreement whereby a B&M engine and crew take the *Green Mountain Flyer* and the *Mount Royal* from Troy to Rutland and back for 6 months and the Rutland returns the favor the other half year rather than change engines at White Creek near Troy. B&M *Pacific* 3705 was doing the honors here, with the *Flyer* at Bennington, Vt.

Tom Mohr
MOPAC FIREMAN R. G. KRAMER, 10 photos away from a complete album of road steam power, *left*, has *Berkshire* 1902 among his 1603 pictures

MISSOURI PACIFIC fireman R. G. Kramer, 532 West Kleberg, Kingsville, Tex., wants help in assembling his nearly complete collection of MoPac steam engine pix. He took up the hobby in 1926; now has photos of 1603 MoPac locos, and needs only Nos. 403, 409, 483, 486, 1233, 1811, 1814, 9740, 9775 and 9779.

* * *

KATHERINE LORENZINO'S "Saga of the Spurs" (Oct.-Nov. '51) is "one of the best true tales I've read in a long time," comments James A. Neubauer of 3320 North Sacramento Avenue, Chicago 18. "Keep up the photograph articles! They sure help beginners like me."

Regarding "The Rocketing Rock Island" (Oct. '51) he writes: "Mr. Davenport and Mr. LeClaire, early officials of the road, founded two Mississippi River cities in Iowa. The one named LeClaire was to get the steamship business and the other, Davenport, the railroad business. However, the railroad got to Davenport first, and the steamship office moved there from LeClaire to compete better with the railroad. LeClaire is now a village of 800 souls who just recently got around to naming its streets."

* * *

RAIL CAREERS for college grads are more promising than some readers seem to think, Maynard W. Krug of 102 Chester Circle, New Brunswick, N. J., writes:

"Upon graduation from college last June I took the job of junior track engineer with the Pennsylvania Railroad in its technical graduate training program. This is a 3-year management training course which prepares graduate engineers for PRR positions of responsibility and leadership.

"Five different programs are offered: track; signals, telegraph and telephone; bridges and buildings; railroad motive power and equipment; and marine equipment. Quoting PRR literature: 'Promotion is the reward of ability and effort, not seniority. Young engineers are encouraged to move ahead, giving every possible help toward advancement.'

"Based upon my own experience, I advise a similar career to any college grad who likes railroading. Among the other roads which offer training courses or give special consideration to technical grads are the B&O, Southern, Santa Fe, IC and D&H."

* * *

RUGGED CAT. When employes of a wool warehouse on the Boston & Maine in Ballardvale, Mass., opened a boxcar door the other day, a sad-faced, half-starved cat slowly emerged. The cat had been on the road 17 days with no food or water since leaving a Wyoming shipping point. A surprised warehouseman fed the animal. Then the cat slunk away, apparently in search of a new home.

* * *

IDENTICAL TWINS, Ralph and Robert Trevillion, started railroading on the same date, Ralph on the Katy and Robert on the Illinois Central. At approximately the same time each man won promotion to assistant general freight agent, general freight agent, freight traffic manager, and general traffic manager.

A few years ago Ralph was made assistant vice-president of the MKT traffic department, and now Robert has the same title on the IC. Each man is married, with three children. A stranger case of coincidence in railroading would be hard to find.

* * *

SMOKELESS is the word for Long Island motive power, except for the steam engines still used on three daily, long-haul, freight trains too heavy for Diesels to handle. Diesels have replaced all steam power on passenger runs. The LIRR now has 66 Diesels, just enough to handle its non-electric passenger trains.

Howard Boyer and C. A. Emry

THE CRICKETTY ROCKET, oddest train in the Rock Island fleet. Strange consist, doubleheaded by Diesels, has a boxcar and four coaches—one white, one streamlined, two old—sneaking out of Oklahoma City

Onero L. Sabetto

BASEBALL ODDITY. Rarely does anyone see a steam locomotive on the Cleveland Union Terminal electric trackage. Westbound baseball excursion train of the New York Central, pulled by *Hudson* 5299, performed the odd feat to get to a doubleheader between the Indians and Red Sox

Authenticated News

. . . OR BUST. Zebulon Montgomery Pike once said the famous mountain he discovered in 1806 would never be scaled by man, but since 1891 over 1,000,000 passengers have ridden to the 14,110-foot summit on the Manitou & Pikes Peak Cog Railway

SNOWBOUND traffic did not keep Keishi Tonegawa, 15-year-old copy boy in the Tokyo Bureau of the Associated Press, from reporting to work. Going to the railroad station as usual, he found the trains were not running, after a heavy snowfall. So he walked to the office. It took him seven hours and 20 minutes. He arrived just in time to turn around and go home. Luckily, the trains were then running.

* * *

OLD HEADS. "I fired for Casey Jones out of Water Valley, Miss., when I began work on the Illinois Central in 1888," writes J. W. Diesel, age 86, Trenton, Ky. "An engineer after 1888, I ran on every division from New Orleans to Clinton, Ill. Seven years later I left the IC and pulled Chicago & Alton trains out of Bloomington, Ill., until I retired in 1938."

Can any woman beat the record of Miss Mary Jane Ansbro, who has retired as secretary in the Frisco's traffic department at St. Louis after working 50 years in the same department?

Joseph W. McNamara, age 78, of Detroit, boasts 64 years' seniority on the Michigan Central and New York Central. He is now record clerk of installations on lines east. Since McNamara began railroading as a messenger in 1887, he has had only four days off (except vacations): his wedding day in 1897 and three days for illness in 1948.

White-bearded and maned 94-year-old Augustine Dunegan, often called "Santa Claus," just died at Highland Park, Calif. He was a semi-recluse who for years had been greeting passing Santa Fe trains by

waving an American Flag at them. Trainmen tossed off newspapers and magazines for him to read. Dunegan had been a railroader himself, first in Pennsy steam engine service, later on the old Pasadena & Los Angeles Electric, retiring from a flagman's job in 1911.

* * *

EIGHTEEN locomotives, stolen from their tracks in Los Angeles, are being sought by police. Two modern Santa Fe Diesels, two Union Pacific hogs, several yard goats, and a balloon-stacked wood-burner of Civil War days. Total value, $2000, lifted from Trexel Brothers shop. All are models.

* * *

CHILDREN usually go to the circus, but Barnes Brothers Circus went to Mary Bade, 7-year-old daughter of a Chicago & North Western brakeman, and gave a special performance outside her home in Stanton, Neb., a week before she died.

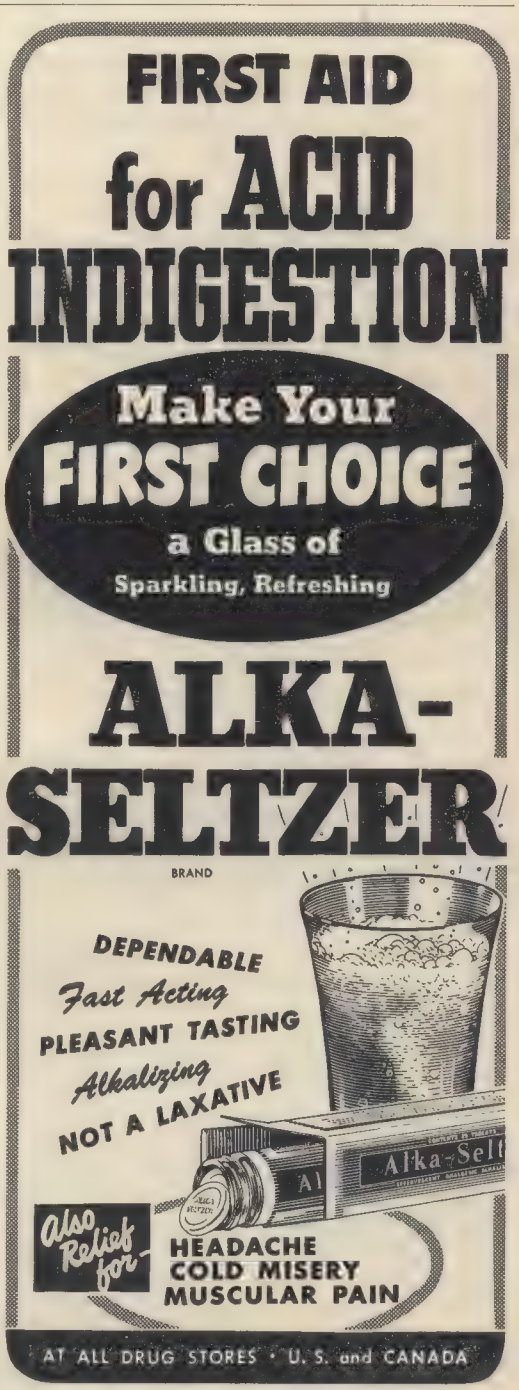
Word had got around that Margaret was dying of an incurable disease. Her father took a leave of absence from work to help care for her. Neighbors donated food and money. Barnes, playing at a county fair three blocks away, sent three elephants, clowns and other performers to give the girl a thrill. The circus paraded from the fair grounds and entertained Margaret, who lay on the lawn in a portable bed covered with blankets. Said her father, "It was wonderful."

Later, he asked that no flowers be sent for the funeral but that, instead, memorial gifts be given to Children's Memorial Hospital, Omaha, Neb.

* * *

SOFT SNAP. Eugene McAuliffe, for years president of the Union Pacific Coal Company and now living in retirement at Omaha, spent part of his early life as a locomotive engineer. He told this story of "the world's laziest brakeman" to E. H. DeGroot Jr. of 924 Colorado Building, Washington, D.C.:

"One evening, while running an engine on the old Wisconsin Central, I was called for a stock extra out of Stevens Point. The young brakeman who coupled me



onto the train was a stranger. As I was oiling around, he came up and said:

" 'Hoghead, set your brakes and I'll look 'em over!'

"I never did like that word *hoghead,* but I got up on the engine and applied the air. The brakeman sauntered back, gave me a signal to release. I can see him yet as he returned to the engine, swinging his lantern as he strode along.

" 'You've got ten, all working,' he announced. 'You can hold 'em with that.'

"As we pulled out of the yard, he squatted on the fireman's seatbox, set down his lantern between his feet, turned the water bucket over it, rested his elbows on his knees with his chin in his hands, and promptly fell asleep. When we reached the first tank, I awakened him with a command to give the engine water, and as we pulled out he went to sleep again. Two hours later I aroused him, saying:

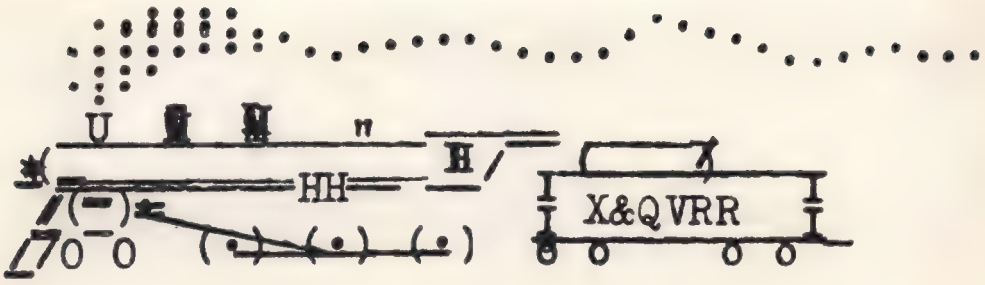
" 'This is a good place for some brass collar to catch you if you don't decorate (get out on top of freight cars to receive or transmit signals or to set hand brakes). When we stop short of the road crossing, you cut off the engine and we'll pull down to the lunch counter.'

" 'Is that an invitation?' he asked.

"I replied that he might think so if he cared to. Shortly afterward he was seated on a high stool beside me, stowing away hot Java, sandwiches and pie at my expense. After that he returned to the engine and grabbed some more sleep. It was daylight when we approached the terminal. I awakened him for the third time. The young brakeman stepped down on the deck. He restored the water bucket to its proper place, gave his lantern an extinguishing jerk and set it down, and stretched luxuriously. Then he said quite innocent-like:

SNAFU SITUATION. Sixty-eight years ago one August day, matters became all fouled up when two Boston & Maine trains, bound to and from the old Haymarket Square Station, met on Causeway Street. They tied up horsecars, wagons and other horse-drawn vehicles for blocks, complicated by sewer excavations. The old Fitchburg Railroad station occupies the present site of the B&M's general offices

Boston & Maine Magazine, Courtesy of Clifford A. Somerville



WHAT HAPPENS to a *Ten-Wheeler* with a typewriter at hand? Paul Moccia of Wakefield, Mass. gives the answer, with a plea: "Please pardon the absence of valve gear"

" 'Feel bully! Had a good night's sleep and I'm all ready to double back.'

"That brakeman was Bill Tyler, who later became a vice-president of the Northern Pacific and director of the Division of Operations in the United States Railroad Administration."

* * *

CANADIAN NATIONAL has just acquired, for $750,000, the 23-mile Montmorency Division of the Quebec Railway, Light & Power Company, running between Quebec and Joachim on the St. Lawrence River. This is the final stretch of a rail line expected to play a big role in carrying titanium ore from Havre St. Pierre to Sorel.

* * *

A PROCESSION of mourners in top hats and frock tailcoats laid a coffin draped in black on British locomotive No. 31705 and placed a wreath on the buffers. The occasion was the last run of the unprofitable Sheppy Light Railway, reports Isaac Kirkham of 206 Furlong Road, Tunstall, England. Bells clanged, whistles blasted, and big drums were beaten as the old train rumbled out of Leysdown on the Isle of Sheppy for its graveyard run over the single-track line. Hundreds of detonators placed on the rails added to the noisy requiem. At every stop villagers swarmed around the engine to wave and shout farewells.

FIFTY years ago, Ottawa & Gatineau (now Canadian Pacific) engineers were ordered to avoid frightening horses, according to C. E. Manion of 635 Cumberland Street, Ottawa, Canada. One of the "Special Rules" in an O&G timetable for 1898 stated:

"Owing to the proximity of Stage Road to railway in many places, great care must be exercised to avoid accidents. Safe side must be taken in all cases, even to bringing train to a stop, closing cylinder cocks, and stopping whistle and bell when horses are seen to be frightened."

* * *

NO. 999 is now taking a long rest in storage. One of the world's most publicized locomotives, a New York Central showpiece for 58 years, it slipped unheralded into Stall 11 of a Toledo, O., roundhouse. Back on May 10, 1893, the 999 set a speed record of 112.5 miles per hour with the *Empire State Express,* being the first engine to top the 100 mph mark.

* * *

RAILROAD STREET is a common name for thoroughfares, judging from readers' replies to a query by Freeman Hubbard, author of *Railroad Avenue,* in our Dec. '51 issue, "What other towns have Railroad Streets?"

The list includes Rockville, S.C.; Gastonia, N.C.; Kingston, N.Y.; Hanover,

E. John Long

MEETING POINT. A Norfolk & Western southbound extra mixed freight train, behind Engine 2166, about to pass the crossover with the Southern Railway at Riverton, Va. Extra was going from Hagerstown, Md. to Shenandoah, Va.

Manheim, Marietta, Palmyra, Annville and Myertown, Pa.; Toledo, O.; Springfield, South Deerfield and Lawrence, Mass.; St. Johnsbury, Vt.; Woonsocket, R.I.; Clinton and Midland City, Ill.; and Rock Island in Quebec and Timmins in Ontario.

Some of these streets parallel the tracks or have rails running down their center, while others bisect the tracks or dead-end at the tracks. New Holland, Pa., has a Railroad Avenue, and Chicopee, Mass., a Railroad Row. You'll find a unique setup in Sandusky, O., with a Railroad Street and a North and South Depot Street (extending on both sides of the New York Central station); a Baltimore Street beside B&O tracks; a Pennsylvania Street

beside PRR tracks and a Lake Shore Avenue beside NYC tracks (formerly Lake Shore & Michigan Southern). And there's a dirt highway called Rail Road paralleling the B&O main line at Midland City, O.

* * *

AMERICA'S longest freight *and* passenger train run for one crew, according to Vernon Lockhart, Union Pacific fireman, Whittier, Calif., is the UP's third subdivision of its Utah Division between Las Vegas, Nev., and Milford, Utah, 242.6. This differs from a *Light of the Lantern* opinion in Dec. '51.

Even longer is the Southern Pacific freight run between Ogden, Utah, and Carlin, Nev., 248.6 miles, reports Fred D. Fellow, Box 317, Farmington, Utah. The Seaboard has a still longer freight run for one crew, 269 miles, between Wildwood and Hialeah Yard (Miami), Fla., reports F. W. Graham, Rte. 8, Box 299-E, Jacksonville, Fla.

"No. 75 makes only one stop enroute," he writes, "at West Palm Beach to set off and pick up, while No. 76 is just a long-barreled local."

The world's longest scheduled non-stop passenger train run is said to be the *Royal Scot's* 401 miles between Euston station in London and Glasgow, but this applies only in summer, when tourist traffic is heavy.

* * *

RIO GRANDE section men moved a piano on their motor-car trailer to the Royal Gorge of the Arkansas River, then teetered with it across a swinging footbridge, all to enable a sick girl, the daughter of Mr. and Mrs. Kenneth E. Allen, to continue with her music study—a dramatic example of the service that railroaders give to the public.

ADVERTISEMENT

Can Man Refuse to Die?

Thirty-nine years ago, in Forbidden Tibet, behind the highest mountains in the world, a young journalist named Edwin J. Dingle found the answer to this question. A great mystic opened his eyes. A great change came over him. He realized the strange Power that Knowledge gives.

That Power, he says, can transform the life of anyone. Questions, whatever they are, can be answered. The problems of health, death, poverty and wrong, can be solved.

In his own case, he was brought back to splendid health. He acquired wealth, too, as well as world-wide professional recognition. Thirty-nine years ago he was sick as a man could be and live. Once his coffin was bought. Years of almost continuous tropical fevers, broken bones, near blindness, privation and danger had made a human wreck of him, physically and mentally. He was about to be sent back home to die, when a strange message came—"They are waiting for you in Tibet." He wants to tell the whole world what he learned there, under the guidance of the greatest mystic he ever encountered during his twenty-one years of travel throughout the world. He wants everyone to experience the greater health and the Power, which there came to him.

Within ten years, he was able to retire to this country with a fortune. He had been honored by fellowships in the World's leading geographical societies, for his work as a geographer. And today, 39 years later, he is still so athletic, capable of so much work, so young in appearance, it is hard to believe he has lived so long.

As a first step in their progress toward the Power that Knowledge gives, Mr. Dingle wants to send to readers of this paper a 9000-word treatise. He says the time has come for it to be released to the Western World, and offers to send it, free of cost or obligation, to sincere readers of this notice. For your free copy, address The Institute of Mentalphysics, 213 S. Hobart Blvd., Dept. C-17, Los Angeles 4, Calif. Write promptly, as only a limited number of the free books have been printed.

FREAK MISHAPS. The *Dixie Flagler's* Diesel locomotive uncoupled herself from her train near Hopkinsville, Ky., we learn from J. Porter Huies of 530 13th Street, Bowling Green, Ky. The engine ran six miles before the fireman chanced to

look back and saw what had happened. The 10 cars rolled to a stop on level track.

L&N brasshats were puzzled. "The locomotive and all cars were coupled with air," said one. "Any separation should at once have set the emergency brakes on locomotive and cars."

A similar mishap occurred about the same time on the B&O's *Washington Express,* reports J. H. Goodson, Box 173, Buckhead, Atlanta, Ga. The engineer decided he was speeding a bit too fast through Chicago's South Side, looked back, and learned why. No train! The 14 cars were found a half-mile to the rear. A broken connection was soon repaired.

ROYALTY. British Railways queen, 15-year-old Betty Chester, *left,* visits the French-owned, English-built engine *Buddicom* at the British Festival. Her solid gold necklace has links shaped like railroad couplings. The royal train of Egypt's King Farouk, *below,* returns to Milano from Lugano, and Italian newspapermen inspect its luxuriousness

Keystone Pictures

MORE THAN $9,000,000 will be spent by the Pennsy to expand and modernize its Morrisville freight yards near Trenton, N.J. The project will serve a new U.S. Steel plant in that area.

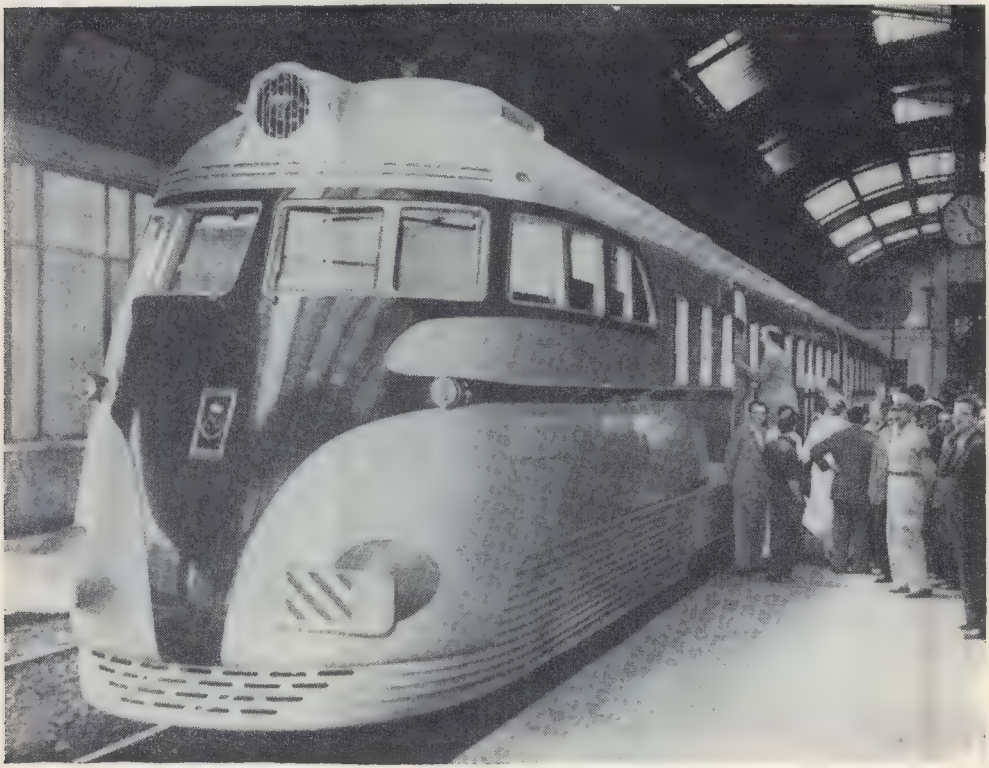
* * *

TRACKSIDE graves are fairly common, but the Illinois Central has the unusual task of providing perpetual care for an entire small cemetery at Neoga, Ill. Several pioneer families are buried there. The IC inherited the graveyard when it acquired the right-of-way a century ago. Crude, time-worn markers give evidence of hardships endured by early settlers. Cholera and "milk sickness" took a heavy toll, wiping out entire families.

* * *

HEROES. More awards are given for snatching persons from in front of moving trains than for any other act of

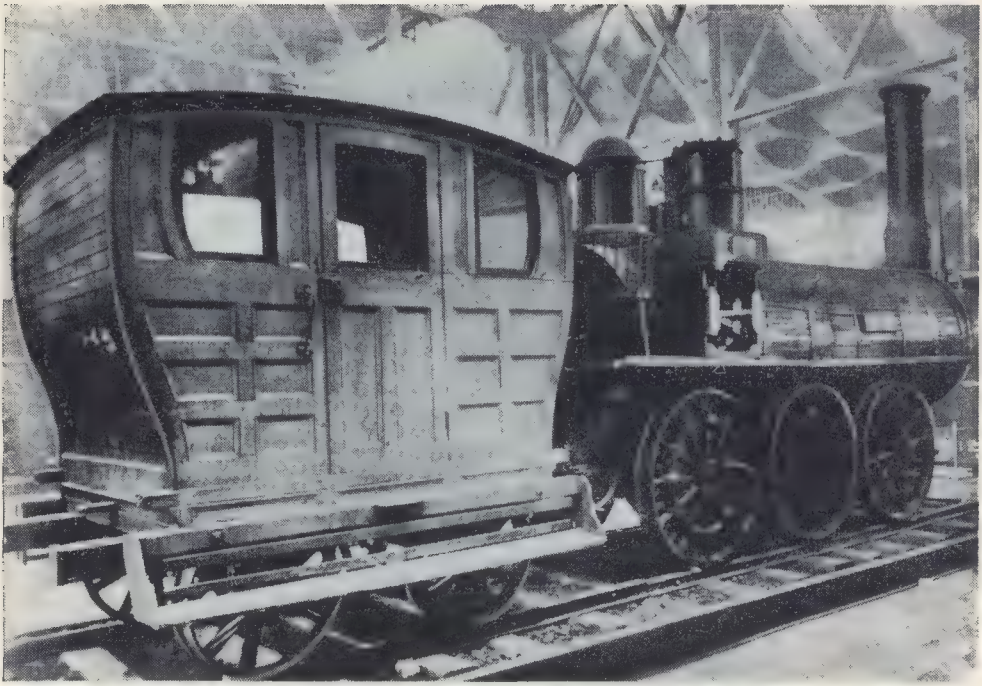
Continued on page 132



J. T. McNamara, Box 310, Vernon, Tex.

NO GO. Frisco passenger train No. 604 ended 49 years of service on the Vernon-Enid branch after leaving J. T. McNamara's home town the morning of June 30, 1951. Reason: Loss of revenue

FORCE of habit makes the bowlered engineer and his fireman stand well apart as they pose for a picture with their "muzzle-loading" Camelback



Canadian National

ILLUSION. It looks for all the world as if the coach were distorted by mirrors. The famous locomotive *Samson* has found a home on the Canadian National lawn at New Glasgow, Nova Scotia. Stakes for a building have already been driven

bravery in the railroad field. Latest recipient of a Carnegie bronze medal is Harold R. Sumner, 27-year-old Milwaukee Road fireman of 912 13th Avenue South, Minneapolis, who leaped out of his engine cab and sprinted across rails in time to rescue James Decker, age 2, from a speeding freight on a parallel track when its locomotive was barely 10 feet from the baby.

This occurred on the Nickel Plate: A Wheeling & Lake Erie District switching crew was working in Toledo when they noticed a 5-year-old boy and his dog stuck in a marsh nearby. They rescued the pair and saw that both got home safely. The

RETIRED. New York City's ex-IRT Car 13 is a dwelling on Highway 30 between England and Stuttgart, both in Arkansas

Stanley D. Crews, Lawrenceburg, Tenn.

Toledo Blade carried a front-page report of the incident. Jack Berch paid tribute to the men on his ABC radio program, *Good Neighbor Club.*

* * *

CHURCH services held in railroad depots have been mentioned in these columns from time to time, and the *Baltimore & Ohio Magazine* tells us that Methodist Sunday school classes were held in the B&O station at Westport, a Baltimore suburb, before the town's first church was built in 1894.

* * *

A PILGRIMAGE over the Southern's old Rat-Hole Division, which used to have "a hot crooked tunnel every six miles", was made by B. H. Nichols because he had wanted to do so ever since he read Herbert G. Monroe's article on the subject in our Jan. '39 issue. Nichols tells about this trip in *The Michigan Railfan.* He rode *The Royal Palm* from Cincinnati to Chattanooga. The Rat-Hole extended between Danville, Ky., and Oakdale, Tenn., which years ago had 23 tunnels in 138 miles but has since been modernized.

EXCURSIONS from Dublin to western Ireland beauty spots conducted by the *Coras Iompair Eireann* (Irish Transport Company) are enlivened by the *Radio Train,* which provides an audience participation show to entertain the other passengers. The cars are equipped with loudspeakers, one car containing a radio broadcasting set. On the outbound trip music is interspersed with comments on places of interest enroute. On the return trip, the broadcasting facilities are utilized by the passengers for community singing and solos.

* * *

ELEPHANTS have long served as switch engines on the railways of India and Burma. The *Southern Pacific Bulletin* reports that American soldiers in World War II were amazed and amused by Moonbeam, a huge elephant which functioned as a switcher at Bogpani on the narrow-gage Bengal & Assam line. Moonbeam not only worked efficiently but, while off duty, entertained the soldiers by imitating human beings. His favorite stunt was to lean against the side of a freight car or a building with his hind legs crossed.

There is very little cost of upkeep for pachyderm switchers. They live in nearby jungles and are brought out by elephant boys only when needed for switching. One elephant, pushing with his head, can easily move 5 to 8 narrow-gage cars at a time.

Donald Sims, Los Angeles 53, Calif.

PAST a waiting Chicago & North Western switcher, a Union Pacific goat hauls a cut of passenger coaches to Union Depot at Omaha, Neb.

Elephants do much better at pushing than pulling. Their skulls at the top are spongy bone filled with an oily substance which cushions jolts.

Conflicting accounts have been given of the way in which Jumbo, the Barnum & Bailey Circus elephant, was killed at St. Thomas, Ontario, by a Grand Trunk freight engine Sept. 15, 1885. A recent *Toronto Globe and Mail* item quotes Fred R. Arnum, retired train dispatcher, as saying Jumbo attacked the engine. Alan R. Crabtree of Meaford, Ont., sent it in.

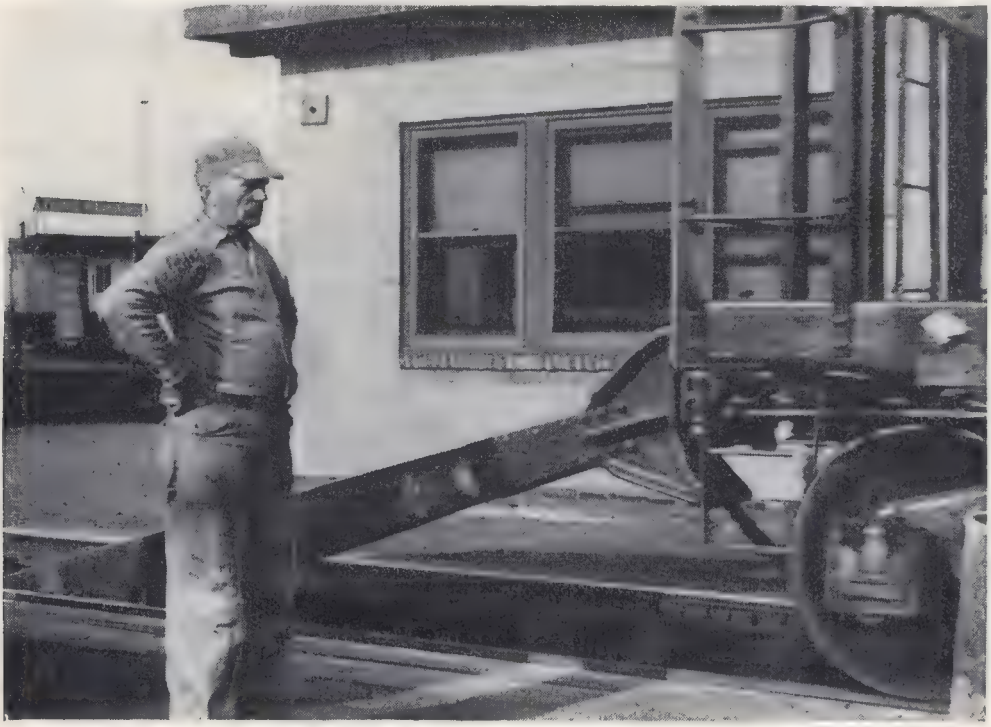
"Mr. Arnum, a GT night operator at the time, is the only one of 38 railway witnesses still living who gave evidence at the inquiry held in New York City. He was there two weeks giving testimony. Mr. Arnum said a circus official disregarded specific instructions given him not to start loading the circus animals until after 9:55 and not until a yard crew came to assist. The locomotive of a westbound freight struck Jumbo in the east yards at 8:18 p.m.

"Mr. Arnum said that when Jumbo saw his danger, he reared up on his hind legs and struck at the locomotive with such force that he broke off the smokestack. A cylinder head drove one of the elephant's tusks back into his skull. Jumbo breathed his last at 4 o'clock next morning."

He was the world's largest circus elephant. Barnum bought him from the London Zoo, which had acquired him from the Paris Zoo. Theodore F. H. Zealand, who witnessed Jumbo's death, gave a full page of details in *Railroad Magazine* back in Feb. '50.

BIG MAC. The Jersey Central's giant coal loader at Pier 18 near the Statue of Liberty boosts one up the ramp to the dumper. Power for the mechanical monster is provided by a cable system driven by an electric motor in *Big Mac's* machine room

Fullerton



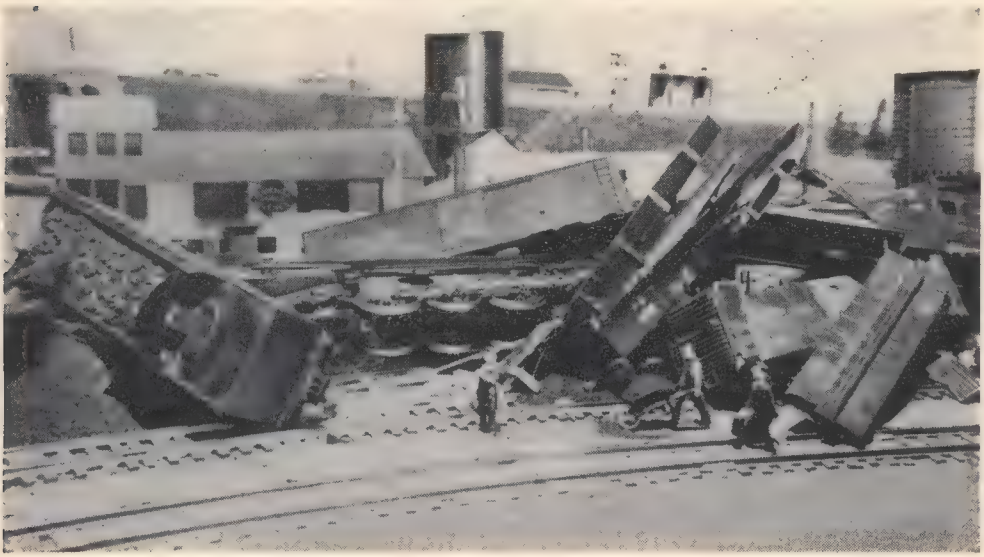
W. R. Osborne

The 6-S-46 Class represents last batch of 6-wheel switchers built for the Jersey Central

WE'VE SEEN photos, old prints and even movies of trains stopped by thousands of grasshoppers or caterpillars on the track, and now the New Haven tells us that wet leaves cluttering up the rails of its Housatonic River line stalled a mighty Diesel with a 100-car freight train, thus delaying a passenger train too. You've heard of "doubling the hill." Well, the freight hogger had to "double" a level stretch, cutting off 50 cars and picking them up later.

STARR LINES is a miniature railroad owned by Southern Pacific fireman Burt B. Starr. His road normally isn't in such a state of confusion, except at set-up wrecks

B. B. Starr, 10633 Charnock Road, Los Angeles 34, Calif.



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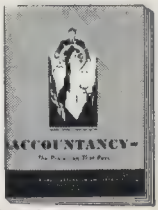

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COMMUTERS. The Burlington thinks it has found the formula for making commuters happy and getting more suburbanites to ride trains. It is simply "pleasant traveling." Two years ago CB&Q decided to improve its commuter service with a $10,000,000 modernization program. The result: instead of continuous complaints the road gets compliments. Now Burlington brasshats are considering further outlays for equipment in the hope of attracting more riders.

Melvin Krampf's "Commuting on the New York Central" (Dec. '51) has been drawing good comments from readers, among them Will V. Faxon Jr., Millburn, N.J., who writes:

"It fits nicely into the department of 'warm glows' and strikes me as a fine tribute to a favorite railroad of mine. The only thing that bothers me is Krampf's reference to 'stringing along with the Toonerville Trolley.' I hope he didn't mean one of the two roads in Jersey which are 'trolley' (overhead catenary) lines, specifically the Lackawanna, which is another

Reader's Choice Coupon

Stories, features and departments I liked best in the March issue are:

1. .....
2. .....
3. .....
4. .....
5. .....
6. .....

Best photo on page

Name .....

Occupation .....

Address .....

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favorite of mine. Besides being a faithful daily rider of the Lackawanna, I have additional reason to be proud of it."

Faxon enclosed a printed slip which he cites as "an example of the consideration and thoughtfulness of the DL&W in dealing with its commuters." The slip, distributed to riders, explained the delay of a certain train as occurring because an engineer had seen an injured man lying on the tracks and made an emergency stop.

Faxon's praise of the New York Central was written just before that road asked the Public Service Commission for permission to increase its commuter fares 30 percent on some tickets and 21½ percent on others. The Central says it is losing more than $2,000,000 a year on its commuter traffic.

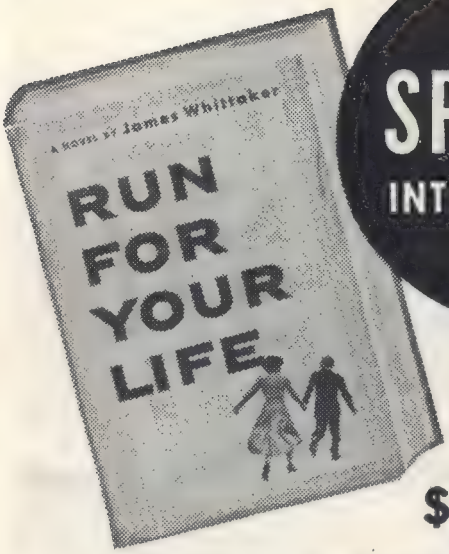
A recent report by the Regional Plan Association shows that, despite population increases, the number of rail commuters from suburban areas into New York City has dropped during the past two decades, and it is logical to assume that this number will drop still further if fares continue to go up.

* * *

LAST STOP is the Reader's Choice Coupon (page 136) which guides your editorial crew in selecting material for future issues of *Railroad Magazine*. Some readers use the coupon. Others prefer not to clip the magazine; they send home-made coupons, postcards or letters. Regardless of how votes are given, all count the same. Results of balloting on the December issue show as follows:

1. Palm Beach Rails, *McBride*
2. On the Spot
   Electric Lines, *Sebree, Maguire*
3. Seattle Station Crisis, *Neuberger*
   Light of the Lantern
4. North Branch Memories, *Denney*
5. Young Runner, *Murdock*
6. Army Railroading, *Milliken*
7. Locomotives of the NC&StL
   No More Whiskers, *Pugsley*

Best photos: pages 44, 27



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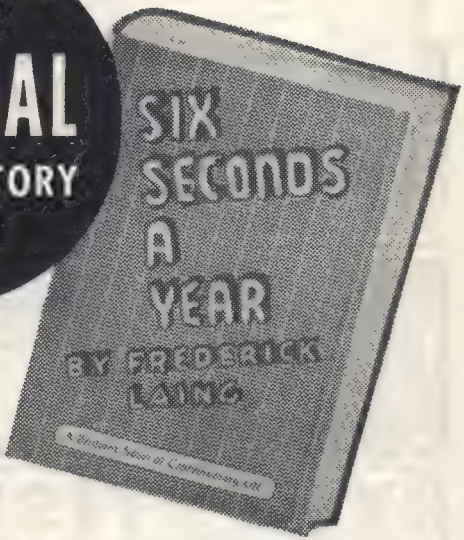

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RUN FOR YOUR LIFE by James Whittaker

(Published at $3.50)

This is a novel which tells how a person becomes a criminal. It's the story of a girl named Jessie Meadowbrook, who loved wisely and too well.

Some people in town tried to cover for Jessie, but more of them tried to punish her. The incident mushroomed, threatening to expose the local gambling business and ruin a mayor. Some of the best people in town were involved. So they ran Jessie out of town. It was hard to tell afterward who was to blame for what happened, but it was Jessie who went to jail for murder.

This is a powerful Dreiserian novel full of sharply edged pictures of complex characters. There's a priggish Sunday-school teacher who never heard of mercy and forgiveness; a hard-bitten and racy Nurse Kinsey in the off-color establishment where Jessie's baby is born. James Whittaker has written with honesty and compassion about people who seldom encounter honesty or compassion.

OR

SIX SECONDS A YEAR by Frederick Laing

(Published at $3.00)

Some of the enthusiastic advance comments on this brilliant first novel:

Burton Rascoe: "Likely to be one of the most closely read and most hotly discussed novels of the year. The question will be: Is the hero a heel, only half a heel or a sensitive idealist? But there will be no question about the heroine—she is a darling in heart and mind. A most unusual, fast-moving and suspenseful story of the achievement of emotional maturity—too late—by a hard-boiled, go-getting young cynic."

William Rose Benet: "Frederick Laing writes with pace and toughness of methods in American business studied at first hand. The girl his 'hero' pursues through the story is courageously American. The ambition, lack of scruple, and amorous infantilism of Floyd Sheldon's final surrender to the business system is social and economic criticism of a searingly personal kind."

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C. T. Steeb

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RAILROAD CAMERA CLUB

ITEMS sent to the *Switch List* and *Model Trading Post* are published free, in good faith, but without guarantee. Write plainly and keep 'em short. Print name and complete address.

Because of time needed to edit, print and distribute this magazine, all material should reach the Editor nine weeks before publication date. Redball handling is given to items we get the first week of each month, if accompanied by latest Reader's Choice Coupon (clipped from page 136 or home-made).

Because of scarcity of space, we prefer that no reader be listed here oftener than once in three months.

Use these abbreviations: *photo*, photograph; *cond.*, condition; *ea.*, each; *elec.*, electric; *env.*, envelope; *eqpmt.*, equipment; *esp.*, especially; *info.*, information; *n.g.*, narrow-gage; *negs.*, negatives; *p.c.*, postcard; *pref.*, preferably; *tr.*, train.

Do not use the term *pix* interchangeably for photos and drawings. Specify *photo* or *drawing*.

The term *tts.* refers to public timetables, unless preceded by *emp.*, when it means employe's (operating) timetables.

(R) indicates desire to buy, swap or sell back issues of *Railroad Magazine* or its predecessors, *Railroad Man's Magazine* or *Railroad Stories*. (Specifiy condition of each copy.)

(*) indicates juicefan appeal.

SWITCH LIST

RICHARD D. ACTON, 2522 Ravenwood Ave., Dayton 6, O., will sell size 616 photos PRR, C&O, B&O, NYC, N&W, AT&SF, CB&Q, UP, C&NW, DT&I; sample, 10c.

CARL J. BACHMANN, 4030 N. Plainfield Ave., Chicago 34, Ill., wants to buy photos D&RGW *Calif. Zephyr* with 7 Diesel units over Soldier Summit between Salt Lake City and Helper, Utah; Soldier Summit coal trs. with D&RGW 3700 class; Diesel helper; 3600 class pusher. Also wants to hear from San Diego railfan he met on E. B. *Calif Zephyr* on July 2 and 3.

(R) L. Y. BEAUJON, Barlow St., Canaan, Conn., offers *Railroad Magazine*, misc. issues, '32, '34 to '37, '29, '43, '45 to '48, '50; *Trains*, misc. issues, '43, '44, '46, compl. '47 to '50; yr.; *R&LHS* mags.; *Moody's RR Manual* '47; recent *Off. Guides;* Annual Reports plus other recent misc. mags. No compl. list.

(R) J. H. BRINCKMANN, Jr., Gen. Del., Stelton, N. J., offers *Railroad Magazine* '34, '35, '45, '46; tts. foreign RRs, steamship lines, airlines, few U. S. emp. tts. List for stamp.

PATRICK L. CARMODY, 186 Prospect Ave., Dayton 5, O., wants photos, info. on Deering Southwestern RR curve-side motor car 82 built 1922 by Cincinnati Car Co.; also wants photos Evans auto-railers, any system.

RAILROAD CAMERA CLUB is open to all who collect railroad or street-car pictures or other railroadiana such as timetables, passes, train orders, trolley transfers, magazines, books, etc. There are no fees, no dues.

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(*) LOUIS CLESSENS, 203 Rue-En-Bois, Liege, Belgium, wants to exch. tram photos from Belgium with Canadian collectors.

R. E. COOPER, 24 Pine St., Oneonta, N. Y., has 400 emp. tts. for trade or sale (pref. trade); mostly NY State area but many others. List for stamped env. or your list.

(R) DR. WM. M. DAVIS, 1700 York Ave., New York 28, N. Y., will sell or trade *Railroad Magazines* compl. yrs. '36 to '41, all '43, $3 yr.; 10 issues '35, 11 '42, 5 '44, $2.50 a yr.; 6 '47, 10 '48, 8 '49, 8 '50, 50c to $1.50 yr. All for $25 or will consider trade of whole lot, not portions, for equivalent worth of HO gage kits or cars in good cond. Write first.

BOB DAWLER, 1020 W. Jackson, Spokane 17, Wash., desires pictures, info. on old Spokane & Inland Empire.

(*) FRANK E. DUPUY, 649 Sycamore Dr., San Gabriel, Calif., wants to buy 1920 model or earlier open 12-psgr. bus, pref. *White* or *Stanley*. Will send 5x7 juice or steam photos to anyone suggesting good lead for psgr. bus.

ALVIN B. EDMUNDS, 54 Linwood Ave., Chelmsford, Mass., will sell tts. prior to 1865, Salem & Lowell, Boston & Lowell, Nashua & Lowell incl. Wilton & Stoney Brook RR unclaimed baggage list; special posters for celebrations; above all now part of Boston & Maine.

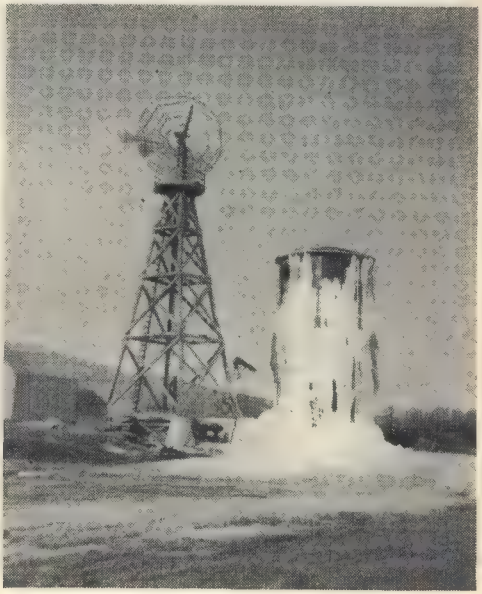
J. HARRY FELDEN JR., 3345 Richmond St., Philadelphia 34, Pa., will sell *Model Railroaders* '44 to '47, 25c per copy, '46, '47 bound vols. $3.35 per vol.; *Trains* Vol. 2, 3, 4, 7 loose copies 25c per copy, bound Vols. 1, 5, $4.50, Vol. 6, $3.25. All mags. new cond.; add 10% postage. Wants 35 mm. Kodachrome slides PRR motive power.

R. FONT, Box 39, Village Sta., New York 14, N. Y., sells *Poors, Moodys, Pub. Util.* vols. '30s, '40s, $6 ea., postage extra, *Lloyd's Register of Amer. Yachts* '19, $5; '26, $8; '39, $8, postage extra. Interested in buying trn. tokens.

RALPH FORTY, SKSN, Navy Supply, Bldg. 321, USMCAS El Toro, Santa Ana, Calif., would like to exch. photos foreign tram cars. Welcomes all corres.

BRRR! Somebody needed a new water tank at Acotia Junction after a cold snap during the winter of 1950-51. Note water spout for locomotives between windmill and water tank

William W. Barnes



Richard L. Neuberger

WAITING FOR THE GUN. Canadian National 5116, a *Pacific*, champs at the bit at Smithers, B. C., waiting for the signal which will send her highballing to Prince George

(R) O. GARCIA, 37-58 64th St., Woodside 77, N. Y., will sell misc. *Railroad Magazines* '38 to '49, eastern items clipped, 20c ea., postage extra, state pref. date; no list. Also clean *Off. Guides* of '40s, '50s, $2 ea., postage extra, 3¼ lbs. ea.

(R) JOHN GAYDOS, 1437 Gregory St., Chicago 40, Ill., will sell *Railroad Magazines*, '40 to date, 5c ea. plus postage; not less than 20 to a person or will trade for model O eqpmt.

(R) S. P. GUTHRIE, Cold Spring, Ky., will sell many *Railroad Magazines, Trains*, reasonable or will trade for eng. negs.; few short line tts., negs., CN& C; p. c. camera *Ica Nixre* f4.5 lens, coupled rangefinder, roll film or packs, $45.

A. G. HALE, 41 Woodcliffe Rd., Lexington 73, Mass., will trade size 616 negs. B&M steam power for same size NP, GTV, UP, SP&S.

(*) ROBERT M. HANFT, 8106 Terrace Dr., El Cerrito 7, Calif., will sell size 116 negs. many Western, Southern, Southeastern rds., steam, trolley, large, short lines. List for stamp.

(*) REGIS A. KAUSLER, 78 Ridgeview Ave., Pittsburgh 6, Pa., wants historical data, tts., p. c's., esp. pictures your local RR station; pre-cancel stamps, Towns on RRs, recordings.

(*) PFC. JOHN KOSCHWANEZ, US55167277, Co. C., 1st Bn.-TRTC, Fort Eustis, Va., wants to corres. with fellow juice fans who would swap 35 mm. color slides. Also will sell size 116 negs. West Coast elec. lines. No list, write wants.

G. B. KRUSCHKE, Box 1078, Clearwater, Fla., wants to buy size 116, 120 negs., steam, Diesel or elec., Birmingham, Mobile, Atlanta, New Orleans, Nashville, Indianapolis, Toledo, Detroit. Write stating price, size; answers all mail.

(R) ROBERT LEIRMOE, 15 Howells Rd., Bay Shore, N. Y., wants back issues *Railroad Magazine, Trains, Travel, FRP* mags.; will trade other issues of same, tts., books. List for stamp.

RALPH LEY, 135-39th Ave., Lachine, Que., Canada, will trade or sell CNR, CPR, also D&H, NYC, B&M, Diesel, steam photos. Send for list. Also will trade enlargements, 5x7 or 8x10; CPR No. 2455 and CNR No. 6401 trs. used by Princess Elizabeth through Canada.

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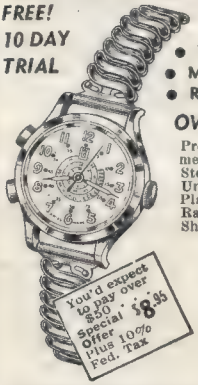

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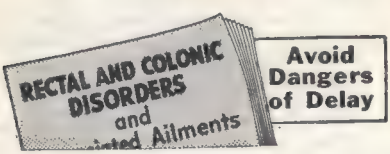

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JOS. McMAHON, 15 Adrian Ave., New York, N. Y., offers *Off. Guides*, var. issues '39 to '50, $1 ea. p.p. east of the Mississippi River.

WM. MacLEAN, 75 Beattie Ave., Middletown, N. Y., will buy Feb. '47 *Railroad Magazine*.

ROBT. B. MARSH, 10 Forest Rd., Wayne, Pa., will sell emp. tts. 35¢ ea., 2 Rdg., Phila. Div. 9 24-50; PRR, Phila. Div. 4-24-49, Middle Div. 9-26-48.

CHARLES E. MILLER JR., 410 Washington Ave., Newton, Pa., wants old-time photos; emp. tts.; info., if any on Phila. & Rdg. Has list of photos Rdg. Newton Br. Send for list.

(R) JOHN PAC, 1546 So. Keeler Ave., Chicago 23, Ill., will sell 25 issues *Railroad Magazine*, '39 to '51, $3.50 for entire lot; postage extra.

NORMAN M. PAULSON, Denver, Iowa, collects, sells and trades tts., photos, tkts., etc. of all RRs and airlines in U. S.; wants to publish a trading post bulletin for RR collectors. Takes 4x5 Graflex photos around NE Iowa.

HERMAN RINKE, Glenwood Gardens, Van Buren House, Yonkers 2, N. Y., will sell limited number emp. tts., NYC Elec. Putnam, Harlem Div., var. dates from '40 to date, reasonable price, covering postage, other costs; send for list.

(R) ONERIV L. SABETTO, 2083 Random Rd., Cleveland 6, O., will sell *Railroad Magazines* Aug., Nov. '37; Oct. '40; Jan., July '41; May '42; Nov. '44; Feb. '46; Oct. '47. Also *Trains* July '43, Oct. '44, good cond., 25¢ ea., plus postage. Needs May, July, Sept., Oct., Dec. '30 *Railroad Magazines*. Answers all mail.

BOB SANDERS, 4905 N. Mississippi Ct., Minneapolis, Minn., has 25 HO cars, good cond.; 17 HO cars, fair cond.; 2 locos; rectifier; other eqpmt. to trade for cameras, pho eqpmt. or your offer.

(R) JOE SENDERAK, 2619 W. Cortez St., Chicago 22, Ill., will sell for reasonable offer plus postage *Railroad Magazines* June, July '33; Feb., Mar., May, Aug., Oct. '34; Mar. '35; Aug. '36; '37 to '51; *Trains* Dec. '40; Aug. to Oct. '41; May, July to Nov. '42; '43 to '51. *Model Railroader* '50, '51; *Model RR Craftsman* Mar. to Aug. '50. All mags. have covers, in good cond. Also has tts.

(*) RICHARD S. SHORT, 226 Valley Rd., Merion, Pa., is selling collec. 1500 elec. ry. negs., present and abdn. lines in East, Midwest, West. Also offers listing size 122, 116 steam photos, mostly PRR, L&N, N&W, B&O. List, sample 15¢.

HOWARD B. SIMPSON, Box 363, Mackinaw, Ill., wants to hear from those selling pictures old-time balloon and diamond stackers; n. g. exc. D&RGW in Colo. and New Mexico.

(*) JIM SPANGLER, 2172 Green Rd., Cleveland 21, O., trades or sells photos, Cleve. Transit.

STAN F. STYLES, 19 West 18th Ave., Vancouver 10, B. C., Canada, sells, trades size 6*6 negs., photos GN, CP, CN, BCE, others; enlarges photos up to 8x10 in.; surplus photos 5¢ ea., action shots steam elec.

(R) J. THOMAS, 2349 Beaufort St., Pittsburgh 26, Pa., will buy Aug. '49 *Railroad Magazine*.

MODEL TRADING POST

ROGER ANDERSON, 524 Whipple St., Eau Claire, Wis., will sell large set *Lionel* elec. trs.; all eqpmt. '50, '51. Will consider selling piecemeal or all, everything at 20% discount; all excell. cond.

ROBERT GARASHA, 4102 Argyle, Chicago 30, Ill., will sell var. HO frt. cars or will trade for HOn3 eqpmt.

DONALD R. GOSHERT, 506 W. 12th St., Sterling, Ill., will trade or sell 0 gage eqpmt. for HO; has 0 cars, engs., tracks, parts, etc.

ROBERT LEIRMOE, 15 Howells Rd., Bay Shore, N. Y., will sacrifice large *Lionel* 0 gage layout $200; list for stamp.

LOUIS F. LEJEUNE, R. R. 2, Fort Erie, Ontario, Canada, will sell 2 compl. trs., ea. having 3 ry. coaches, 1 spare loco, spare parts; these are the famous Crystal Beach Park steam trs.

JOHN F. LOCKE, Hoosac School, Hoosick, N. Y., wants to trade photos, other material Maine Central, NYC, Fairbanks-Morse, for HO frt. cars in kit or finished form.

BEN SMITH, 265 Tompkins Ave., Brooklyn 16, N. Y., has std. gage engs., *Lionel*, single and double motors; *Ives; AF;* Boucher 6-wheel drive 2222, 2500. Also has much built-up excell. HO gage locos, cars, some brand new HO gage engs., cars in kits. Will sell or trade for scale 0 gage, or *Lionel* 072 scale trs.

W. PERRY WILLIAMSON, 1061 E. Market St., Apt. 9, East Akron, O., wants *Lionel* locos 224E, 225E, 226E; *Lionel* O gage 600, 800 series cars; *AF* O gage 3500 series frt. cars.

FLAGSTOPS

DODGERTOWN RAIL TRIP to Vero, Fla., an all-expense rail trip from New York, Philadelphia and Washington, D. C. is being planned for the Easter vacation period, April 6th to 14th; will operate over the Pennsylvania, Atlantic Coast Line and Florida East Coast RRs, incl. a week's stay at Vero Beach. First class equipment will be furnished, with 2 diners and a club car; various entertainment on board, with plans for many daily side trips such as McKee Jungle Gardens, Bok Tower, a sugar mill, fruit packing house, the beach, the Dodger farm team baseball games at their practice field in Dodgertown. Climaxing the trip will be an Easter sunrise service on the beach. It is believed that 400 to 500 people will take advantage of this all expense tour—cost of entire round trip to be $169.50, including tips—no additional cost; children to 12, half-fare. Profits will go to various civic organizations and charities. Write Bill Gimlich, Trip Manager, East Chatham, N. Y.

EUROPEAN RAILWAYS, a monthly publication of 12 issues, $1.50, may be obtained by sending international money order to Robert Spark, 48 Cedar Rd., Sutton, Surrey, England. Contains news, pictures and historical facts about Europe's railways.

MILWAUKEE CHAPTER of the NRHS meets in the conference room of the Milwaukee Public Museum, 818 W. Wisconsin Ave.; meetings to start promptly at 7:30 p. m., the 4th Friday of each month, effective Dec. 28. For further details call or write John E. Croy, Secretary, Milwaukee Chapter, NRHS, Central Region, 3206 N. Holton St., Milwaukee 12, Wis.

NEW YORK SOCIETY of Model Engineers will hold its 22nd annual exhibition in the upper ferry concourse of the Lackawanna Terminal in Hoboken, N. J. from Friday, Feb. 8 to Sunday, Feb. 24, 1952. In addition to the expanded O gage *Union Connecting RR* and the newly-built HO gage *Union, Hoboken and Overland RR* there will be a number of outstanding amateur and professional models in many fields of model activity. Hours will be 5:30 p. m. to 10 p. m. weekdays; 1 p. m. to 10 p. m. Saturdays, Sundays and Holidays. Admission, adults 35c, children 20c.

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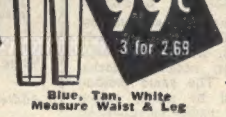

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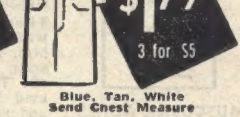

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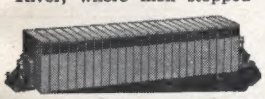

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